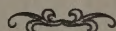


The North Central Association Quarterly



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based on research work in fields determined by the Commission.

[This Commission also has special committees which function only at the time of the annual meeting. These committees have not yet been appointed.—The Editor.]

B—Committees of the Commission on Unit Courses and Curricula

I. COMMITTEE ON STANDARDS FOR USE IN THE REORGANIZATION OF SECONDARY SCHOOL CURRICULA.

The work of this committee dates back to 1921. The first report, tentative in nature, appeared in Part III of the Proceedings of the North Central Association of Colleges and Secondary Schools for March, 1924. The scope of the activities of this committee has grown greatly and now is made up of a number of sub-committees working upon special subjects. Reports on the qualitative standards for reorganizing secondary school curricula appeared in the March, 1927, and March, 1928 numbers of the North Central Association Quarterly. At the present time some of the sub-committees are engaged in working on the quantitative standards. Members of the committee:

J. A. Clement, University of Illinois, Urbana, Illinois.

C. O. Davis, University of Michigan, Ann Arbor, Michigan.

T. M. Deam, Joliet Township High School and Junior College, Joliet, Illinois.

J. E. Foster, Iowa State College, Ames, Iowa.

T. W. Gosling, Supt. of Schools, Akron, Ohio.

A. W. Hurd, University of Minnesota, Minneapolis, Minnesota.

W. H. Lancelot, State Teachers College, Ames, Iowa.

Miss Olivia Pound, Lincoln, Nebraska.

H. H. Ryan, University of Michigan, Ann Arbor, Michigan.

H. L. Smith, University of Indiana, Bloomington, Indiana.

J. E. Stout, Northwestern University, Evanston, Ill.

W. H. Uhl, University of Wisconsin, Madison, Wisconsin.

G. W. Willett, Lyons Twp. High School, La Grange, Ill.

B. C. Lawson, University of Illinois, Urbana, Illinois.

F. E. Clerk, New Trier Twp. High School, Kenilworth, Ill.

E. R. Downing, University of Chicago, Chicago, Illinois.

L. W. Smith, Superintendent of Schools, Berkley, Calif.

J. M. Hughes, Northwestern University, Evanston, Ill.

Thomas J. Kirby, University of Iowa, Iowa City, Iowa.

R. L. Lyman, University of Chicago, Chicago, Illinois.

W. C. Reavis, University of Chicago, Chicago, Illinois.

Raleigh Schorling, University of Michigan, Ann Arbor, Mich.

R. M. Tryon, University of Chicago, Illinois.

W. G. Whitford, University of Chicago, Chicago, Illinois.

L. W. Webb, Chairman, Northwestern University, Evanston, Ill.

(1) SUB-COMMITTEE ON ENGLISH:

Mary A. Ayres, Children's Librarian, Madison, Wis.

Walter Barnes, Fairmont, West Virginia.

Emily Ethell, Lyons Twp. High School, La Grange, Illinois.

J. E. Foster, Ames. Iowa.

Mary S. King, New Trier High School, Winnetka, Illinois.

S. A. Leonard, University of Wisconsin, Madison, Wis.

Hanna Logasa, University High School, Chicago, Illinois.

K. Irene Nelson, University Schools, Iowa City, Iowa.

Ruth Sankee, High School, Decatur, Illinois.

Dora V. Smith, University High School, Minneapolis, Minn.

Helen E. Martin, Haven School, Evanston, Illinois.

R. L. Lyman, University of Chicago, Chicago, Chairman.

(2) SUB-COMMITTEE ON FRENCH:

Emma Reinhardt, University of Illinois, Urbana, Illinois.

Jesse Mahlon Harvey, University of Illinois H. S., Urbana, Ill.

J. B. Thorp, Asst. in Romance Languages, U. of Ill., Urbana, Ill.

J. A. Clement, University of Illinois, Urbana, Illinois, Chairman.

(3) SUB-COMMITTEE ON LATIN:

Miss Olivia Pound, Lincoln, Neb.

(4) SUB-COMMITTEE ON GENERAL SCIENCE:

F. D. Curtis, University of Michigan, Ann Arbor, Michigan, Chairman.

J. A. Clement, University of Illinois, Urbana, Illinois.

L. W. Webb, Northwestern University, Evanston, Illinois.

(5) SUB-COMMITTEE ON BIOLOGY:

E. R. Downing, School of Education, University of Chicago, Chicago, Ill.

(6) SUB-COMMITTEE ON PHYSICS:

J. M. Hughes, Northwestern Univ., Evanston, Illinois.

A. W. Hurd, University of Minnesota, Minneapolis, Minn.

(7) SUB-COMMITTEE ON CHEMISTRY:

W. H. Lancelot, State Teachers College, Ames, Iowa.

(8) SUB-COMMITTEE ON HOME ECONOMICS:

Anna Belle Robinson, Associate in Home Economics Education and Supervisor of Home Economics in the University High School, University of Illinois, Urbana, Illinois.

Florence Mary King, Instructor in Home Economics Education and Critic Teacher in the Urbana High School, University of Illinois, Urbana.

Elizabeth Todd, Associate in Home Economics in Urbana High School, University of Illinois, Urbana.

Marion B. Whittle, University of Illinois, Urbana, Illinois.

Mildred Alice Daniels, University of Illinois, Urbana, Illinois.

J. A. Clement, Chairman, University of Illinois, Urbana, Illinois.

(9) SUB-COMMITTEE ON PHYSICAL EDUCATION:

G. T. Stafford, Asst. Professor of Orthopedics and Physical Diagnosis, University of Illinois, Urbana, Illinois.

S. C. Staley, Assoc. Professor of Physical Education, University of Illinois, Urbana, Illinois.

Milton, M. Olander, Assoc. in Physical Education and Athletic Coaching, University of Illinois, Urbana, Illinois.

Mrs. Maurine Bone Staley, Former Instructor in Physical Education, Illinois State Normal University, Normal, Ill.

linois (present address, Urbana, Ill.).

Helen B. Knight, Instructor in Physical Education in Morgantown (Senior) High School, Morgantown, West Virginia.

Carlos J. Wagner, Associate in Physical Education and Athletic Coaching, University of Illinois, Urbana, Illinois.

J. A. Clement, Chairman, Professor of Education, University of Illinois, Urbana, Illinois.

(10) SUB-COMMITTEE ON JUNIOR HIGH SCHOOL MATHEMATICS:

Raleigh Schorling, University of Michigan, Ann Arbor, Michigan.

(11) SUB-COMMITTEE ON SOCIAL STUDIES:

Elsa Klein, Supulpa, Okla.

H. O. Johnson, Crystal Falls, Michigan.

Myrtle Heard, Youngstown, Ohio.

Carl Eibler, Evansville, Indiana.

R. M. Tryon, Prof. of the Teaching of History, U. of Chicago, Chairman.

(12) SUB-COMMITTEE ON FIRST YEAR SPANISH, FIRST YEAR GERMAN.

Spanish—Charlotte C. Starrs, Virginia Bostick, Katherine Gonzalez, Alma Schulkey, H. B. Wood, Edith J. Christenson.

German—Albert Ahrends, S. E. Adair. H. H. Ryan, Chairman.

(13) SUB-COMMITTEE ON AGRONOMY:

B. C. Lawson, Instructor in Agricultural Education, University of Illinois, Urbana, Illinois.

L. L. Scranton, Instructor in Agricultural Education and Critic Teacher in Vocational Agriculture, U. of Illinois.

J. A. Clement, Professor of Education, University of Illinois.

C. R. Kinison, Asst. in Education and

Critic Teacher in Industrial Education, University of Illinois High School.

(14) SUB-COMMITTEE ON ART:

William G. Whitford, Associate Professor in Art Ed., University of Chicago.

Mrs. Kathryn D. Lee, Instructor of Art, U. of Chicago High School.

Miss Myrtle Poindexter, Asst. Supervisor of Art, City Schools, Fort Worth, Texas.

Miss Jessie Todd, Instructor of Art, University of Chicago Ele. School.

Miss Mabel Williams, Instructor of Art, J. Sterling Morton School, Cicero, Illinois.

Miss Mildred Larsen, Instructor of Art, Public Schools, Downers Grove, Illinois.

(15) SUB-COMMITTEE ON MUSIC:

Edgar B. Gordon, University of Wisconsin, Madison, Wisconsin.

W. L. Uhl, University of Wisconsin, Madison, Wisconsin.

John W. Beattie, Northwestern University, Evanston, Ill.

Russell V. Morgan, Director of Music, Public Schools, Cleveland.

(16) SUB-COMMITTEE ON EXTRA-CURRICULAR ACTIVITIES:

M. H. Willing, Asst. Prof. of Secondary Education, University of Wisconsin, Madison, Wisconsin.

Lura Blackburn, Teacher of English, Oak Park High School, Oak Park, Illinois.

F. D. Frisbie, Teacher of Social Science, New Trier Twp. High School, Kenilworth, Illinois.

W. C. Baer, Principal High School, Danville, Illinois.

Thomas M. Deam, Asst. Supt. of Joliet Twp. High School and Junior College, Joliet, Illinois, Chairman.

II. COMMITTEE ON THE PROFESSIONAL TRAINING OF THE HIGH SCHOOL TEACHERS IN THE NORTH CENTRAL TERRITORY

The work of this committee was mapped out for them by the assignment when the Commission on Unit Courses and Curricula was asked to undertake the study. The following is the resolution or motion responsible for the creation of this committee:

"Moved that the Commission on Unit Courses and Curricula be requested to initiate an investigation of the general problem of the professional training of high school teachers, including a study of typical domestic and foreign methods, with a view, first, to determining whether and to what extent graduate instruction should supplement or be substituted for the present system of undergraduate teacher training courses. Second, to securing for prospective teachers the benefits of effective practice teaching under competent direction. Third, to indicate a procedure that may bring about more uniformity in the minimum legal requirements of the various states in the North Central territory with reference to the professional training of teachers."

A complete report of this committee is to appear in a forthcoming number of the North Central Association Quarterly.

The personnel of the committee was continued for next year, and for the present year they hope, first, to encourage professional training among present North Central Association teachers, and, second, to concentrate attention on "practice teaching" or participation in teaching by students in teachers' colleges.

Personnel of the committee:

H. H. Ryan, University of Michigan, Ann Arbor, Michigan.

H. L. Miller, University of Wisconsin, Madison, Wisconsin.

M. H. Stuart, Arsenal Technical High School, Indianapolis, Indiana.

G. W. Willett, Lyons Township High School, La Grange, Illinois.

L. W. Brooks, Wichita High School, Wichita, Kansas.

F. L. Bacon, Evanston Township High School, Evanston, Illinois.

F. E. Henzlik, University of Nebraska, Lincoln, Nebraska.

Will French, Lincoln High School, Lincoln, Neb., Chairman.

C—Committees of the General Association

(1) COMMITTEE ON ARTICULATION OF HIGH SCHOOLS AND COLLEGES

Charles H. Judd, University of Chicago, Chicago.

George F. Zook, University of Akron, Akron, Ohio.

W. W. Boyd, Western College for Women, Oxford, Ohio.

H. M. Gage, Coe College, Cedar Rapids, Iowa.

Secretary J. B. Edmonson, University of Michigan, Ann Arbor.

It was to be the function of this committee to obtain financial means for carrying on their work and to interest other regional associations of the United States; also to set up the machinery for making a study of college and high school standards.

(2) COMMITTEE ON HOTEL HEADQUARTERS FOR THE 1929 MEETING:

C. H. Perrine, Lake View High School, Chicago.

Secretary J. B. Edmonson, University of Michigan, Ann Arbor.

(3) DELEGATES TO THE NATIONAL COUNCIL OF EDUCATIONS

Charles H. Judd, University of Chicago, Chicago.

President W. I. Early, High School, Sioux Falls, South Dakota.

Secretary J. B. Edmonson, University of Michigan, Ann Arbor.

(4) REPRESENTATIVES TO THE REGIONAL ASSOCIATIONS:

Northwest Association of Secondary and Higher Schools—C. R. Maxwell, University of Wyoming, Laramie.

Association of Colleges and Secondary Schools of the Middle States and Maryland—George F. Zook, University of Akron.

Association of Colleges and Secondary Schools of the Southern States—President W. I. Early, High School, Sioux Falls, South Dakota.

(5) BUDGET COMMITTEE:

President W. I. Early, High School, Sioux Falls, South Dakota.

Secretary J. B. Edmonson, University of Michigan, Ann Arbor.

Treasurer E. H. K. McComb, Emerich Manual Training High School, Indianapolis, Indiana.

By action of the executive committee the budget committee consists of the president, secretary and treasurer of the Association.

(6) COMMITTEE ON PROGRAM:

President.

Secretary.

Chairmen of the three Commissions.

By action of the executive committee the committee on program consists of the president, secretary and chairmen of the three commissions of the Association.

(7) HONORARY MEMBERSHIP COMMITTEE:

W. P. Morgan, Western State Teachers College, Macomb, Illinois. Mr. Morgan was appointed by the executive committee to nominate individuals for honorary membership.

(8) SELECTIVE GROUP OF HIGHER INSTITUTIONS COMMITTEE:

W. W. Boyd, Western College for Women, Oxford, Ohio.

F. C. Landsittel, Ohio State University, Columbus, Ohio.

George F. Zook, University of Akron, Akron, Ohio.

It was to be the function of this committee to select a group of institutions for the purpose of carrying on experimentation.

(9) NATIONAL COMMITTEE ON RESEARCH IN SECONDARY EDUCATION:

Secretary J. B. Edmonson, University of Michigan, Ann Arbor.

The North Central Association of Colleges and Secondary Schools is one of the eighteen national and regional associations that is furthering the work of the National Committee on Research in Secondary Education.

(10) COMMITTEE ON LIBRARY STANDARDS:

George A. Works, University of Chicago, Chicago, Illinois.

Miss Betty Pritchett, Coe College, Cedar Rapids, Iowa.

Edgar King, Miami University, Oxford, Ohio.

FEDERAL GRANTS FOR RESEARCH

The special committee appointed at the last meeting of the North Central Association to secure, if possible, a federal grant for a study of relations between high schools and colleges took steps immediately after its appointment to present the case to a committee of Congress. On April 26th five members of the Association went to Washington and presented the matter to the Committee on Education of the House of Representatives. The committee was able to submit at the hearing letters from all of the regional associations of the United States supporting its proposal. President Early spoke for the Association as a whole. Dr. Boyd spoke for the colleges in the Association. President W. P. Morgan spoke in behalf of the teachers' colleges. This he was able to do effectively because he is not only a member of the North Central Association but is this year President of the National Association of Teachers' Colleges. Principal H. V. Church represented the secondary schools and in his capacity as Secretary of the Department of Secondary School Principals spoke in behalf of the high schools of the country at large. The chairman of the committee, Professor Judd, presented the plan in detail and gave some account of the limits of inquiry which will be followed if the appropriation is granted.

Since the hearing before the House Committee, the committee of the North Central Association has been active in bringing the matter to the attention of the Secretary of the Department of the Interior and the Commissioner of Education. Both of these officers have exhibited a cordial interest in the proposal and are giving it careful attention.

A PROPOSAL

The Treasurer of the Association has said frequently that much waste effort is expended annually in seeking to collect membership dues from a few dilatory schools. In consequence of this fact would it not be desirable to have a regulation calling for the payment of all North Central Association dues at the time the annual blank is made returnable, December first. Surely such a regulation could conduce to system, economy and convenience of the Treasurer and tend to prevent embarrassing errors in the publication of facts.

CALIFORNIA MAY ORGANIZE

Professor John S. Nollen of Grinnell College, Iowa, and one of the active members of the North Central Association has been spending the winter and spring in California. He writes the Editor as follows: "There is a lot of interest hereabouts in the organization of a similar association in this part of the country and at a recent meeting it was unanimously resolved to cooperate with the state superintendent here in California in getting such an association under way."

THE 7-7 PLAN—WHY NOT?

Professor Nollen writes: "The 6-4-4 plan is definitely adopted by Pasadena and will no doubt spread rapidly here in California. Why doesn't somebody try a 7-7 plan and simplify administration still further?"

THE PRELIMINARY CURRICULUM REPORT

One year ago when reprints of the various curriculum studies were issued a general statement of the purpose, his-

tory and plan of the analyses put out by the Commission on Unit Courses and Curricula was attached. This year, when additional subjects of study were outlined qualitatively and reprints published, the general statement was omitted. This was doubtless a misfortune. In order, therefore, to correct the mistake the Commission has had published a goodly number of copies of the general introductory part. Any schools interested in having copies of this preliminary material are requested to write the Editor and they will be furnished gratis.

SHUFFLINGS

A considerable number of changes of school positions have recently taken place among the active members of the North Central Association. For example, Superintendent Thomas W. Gosling of Madison, Wisconsin, has become superintendent of the Akron, Ohio, schools; Superintendent C. F. Miller of Galesburg, Illinois, is to be superintendent of the Saginaw, Michigan, schools; Superintendent L. W. Smith of Joliet, Illinois, has accepted the superintendency of the Berkeley, California, schools.

NEW REGULATION NUMBER NINE AND ITS INTERPRETATION

The Regulation,—“No new school will be accredited which employs less than five full-time teachers, or the equivalent, four of whom, or the equivalent, must be full-time teachers of academic subjects.

All teachers of academic subjects in new schools and all new teachers of academic subjects in accredited schools must teach in the fields of their major or

minor specialization in college preparation.”

This regulation embodies the principal changes that were made in the provisions governing the accrediting of secondary schools at the last meeting of the Association. For the past two years the minimum requirement as to the number of teachers has been the equivalent of five full-time teachers of academic subjects. The new regulation makes it possible to use one of the minimum of five teacher for non-academic subjects.

A great many requests have been received by the secretary of the Committee on Standards, who is charged with the responsibility of interpreting standards during the interim between annual meetings, for an interpretation of the second paragraph of the regulation. It appears that from the quantitative standpoint the terms *major* and *minor* are not standardized. The amount of work which forms the basis for granting majors and minors varies greatly among institutions of higher learning. It appears from such investigation as it has been possible to make that a *major* as the term is most commonly used represents approximately one year of college work in a given subject or in closely related subjects, and that a *minor* represents an amount of work equal to one third of a major.

In other words a *major* represents thirty semester hours of work and a *minor* ten semester hours. As thus interpreted the regulations means that no teacher in a school applying for accrediting and no new teacher in a school now accredited may be assigned to teach a subject in which she has had less than ten semester hours of college preparation.

(C. C. Brown)

Training College Instructors

By M. E. HAGGERTY, SECTY.

(*A Committee Outline*)

Memorandum on the Work of the Committee on Professional Training of College Instructors Presented to the 1928 Meeting of the North Central Association of Colleges and Secondary Schools:

During the year the Committee projected four lines of study following the report made at the annual meeting in March, 1927.

1. Occupational Destination of Ph. D. Recipients.

The first of these studies related to the occupational destination of Ph. D. recipients from a number of American Universities. The institutions covered were Harvard, Princeton, Chicago, California, Wisconsin, Minnesota, and Johns Hopkins. For each of these institutions the entire list of Ph. D. recipients was available and they have been studied with reference to the present occupation of those still living. The general result of this study is to show that by far the major portion of persons receiving the degree are now engaged in teaching, primarily in college and university teaching.

These data, coupled with the fact that in graduate schools generally no provision is made for the professional training of Ph. D. candidates, indicate the need for some modification of the program of graduate training. The report of this investigation will be printed in the October issue of the *Educational Record*.

2. State Requirements for Junior College Instructors

The second line of investigation has to do with the present requirements for instructors in public junior colleges. State Departments of Education in a number of states are specifying definite scholastic requirements for the certification of public junior college teachers. In some states there is a requirement for professional training in addition to academic training. The record of these requirements will be shortly printed in the *Quarterly* of the North Central Association.

3. Experimental Advances in College Education

The third line of investigation was a questionnaire study of changes now being undertaken in American colleges. A preliminary inquiry revealed the fact that a large number of institutions is undertaking definitely to modify their present program of college education. In response to the preliminary questionnaire six hundred thirty replies were received, and these showed that three hundred sixty-four institutions had undertaken such changes in recent years. From these responses, it would appear that the several departments of experimentation engage the efforts of institutions as follows:

Reorganization and administration—135 institutions

Reconstruction of curricula—222 institutions

Matters of student personnel—256 institutions

Problems of instruction—122 institutions

A second step in this investigation is being undertaken by means of a somewhat more elaborate questionnaire designed to discover in detail the particular changes which are going forward. An analysis of the replies to this second questionnaire is now under way and will constitute a report of some length to be

made at the meeting of the Association in March, 1929.

4. Annotated bibliography

The fourth line of study by the Committee is an annotated bibliography of the experimental and other scientific studies in the field of college education. This bibliography is in process of preparation and will be presented to the Association at the March meeting in 1929.

M. E. Haggerty.

Other Association Committees

It was the intent to publish in this issue of the QUARTERLY the complete lists of all Association committees. However the Secretary of the Commission on Higher Institutions has found it impossible to collate the lists for that Commission. Consequently these Committees will be published later.

Athletic Requirements of the North Central Association

Report of the Committee on Athletics to the Commission of Higher Education, 1928

ADOPTED AS THE OFFICIAL INTERPRETATION OF STANDARD NO. 9 OF THE ASSOCIATION, RELATIVE TO ATHLETICS

In March 1927 your Committee made a preliminary report embodied in five articles, and making suggestions as to possible methods of establishing an athletic standard or standards for North Central Association Institutions of Higher Education.

The Association voted to instruct the Committee to send copies of this preliminary report to all member institutions for criticisms, suggestions and individual approval or disapproval.

These instructions have been carried out and the Committee is now ready to present a revision of its original report on the basis of the returns from the member institutions, although a considerable majority of the institutions have not, as yet, replied to the inquiries sent out by the Committee.

As a matter of fact, only 21 institutions responded with suggestions, criticism, approval or disapproval, following the first broadcasting of the report last April. This appeared to be so small a percentage as to be hardly representative of the 251 member institutions. So, early in January, a second copy of the report was sent to each institution, accompanied by a tabulated statement of the reports from the 21 members which had replied to the April communications. Since sending out the January letters 87

additional replies have been received, so that we now have had replies from 108 of the 251 member institutions.

The Committee feels that these 108 replies are fully representative of our entire group for they have come from all the states of the North Central area and, in some instances, the institution actually replying has responded for the entire local athletic conference of which it is a member. Universities, Colleges, Teachers' Training Colleges, and Junior Colleges are all well represented in the replies received, and not one of the 108 replies has expressed any real dissatisfaction with the nature of the report as a whole, altho six, that expressed themselves as profoundly in sympathy with the standards suggested, doubted whether an adoption of these standards by the North Central Association would really contribute very effectively to any needed changes.

Several of the replies came from colleges for women, and these institutions preferred to refrain from any definite statement of attitude on a matter which does not immediately concern them. With these exceptions the entire list of 108 approved the general content of the report. Eighty of the institutions commented in more or less detail on various items of the report and made positive

suggestions as to its final form. Ten of this number positively objected to Article III on "tone" as being too vague and ineffective a standard. Ten advocated Article IV, requiring membership in an accredited Athletic Conference, as being all that is necessary in the way of a North Central Athletic standard. About the same number seriously objected to this same Article IV being made a standard. Forty-six institutions voiced a decided preference for Article V with its 8 sections stating principles involved, but a few of this number criticised the wording of each of the 8 sections with the single exception of Sec. 2 on academic requirements and scholarships. Sixteen replies definitely and positively stated a preference for a combination of Articles IV and V as alternative standards for the various member institutions.

In formulating the following report on standards for adoption and use by the Commission of Higher Education of the North Central Association, we have given due consideration to all suggestions made in the replies and have utilized those which seemed desirable, either because of a concensus of the opinion or because of their real constructive value, even though the latter suggestion may have come from only one institution.

I

The Committee is of the opinion that this Association should go on record in declaring that the academic, health and character interests of student bodies as a whole are paramount, and that athletic activities and standards which fail to contribute to these general interests must be changed by adopting a standard of rules and principles, which will tend to effectively secure for our institutions a condition in which the athletic program

becomes an essential and co-ordinated feature of the general educational program. The "tone" of athletics must be in harmony with the general "tone" required for accrediting in this Association.

II

While other agencies are working on this same problem, notably the Carnegie Foundation, through the agency of Dr. H. J. Savage and his associates, at the request of the National Collegiate Athletic Association, it is the belief of your Committee that the cause will be greatly aided if, instead of waiting for the final findings of the Carnegie Foundation reports, this Commission will at this time take a definite and positive stand, establishing certain basic principles and requirements. We, therefore, recommend the adoption of Articles III and IV which follow as alternative methods of securing for our member institutions the athletic standards which can be considered proper for accrediting.

III

That a list of accredited Athletic Conferences be drawn up by this Commission, and any member institution maintaining a membership in good standing in any one or more of these accredited Athletic Conferences be considered, without further action, to be maintaining approved athletic standards.

IV

That in the case of member institutions that do not maintain membership in good standing in such an accredited athletic conference, the following standard of athletic principles be adopted as determining the basis of accrediting:

(1) Final decision in all matters of athletic policy shall rest with the faculty

or with administrative officers representing the faculty.

(2) Academic requirements and assignments of scholarship, student aid funds, and remunerative employment for students shall be immediately and finally controlled by the faculty, acting directly or through its regularly constituted officers of committees, without discrimination either in favor of or against athletics.

(3) Payments of money to students for services as athletes, hiring athletes or the equivalent of such procedure, and maintenance of free training tables are not permissible.

(4) Personal solicitation of prospective students by athletic coaches through the offering of any such special inducements as are indicated in Sec. 3 above is not permissible.

(5) Coaches should be regularly constituted members of the faculty, fully

responsible to the administration.

(6) Faculties should control and keep within reasonable limits the amount of time devoted to athletics. This refers to hours of daily practice as well as to the number of contests and length of trips, or any other athletic requirements which detracts from academic efficiency.

(7) Athletic conditions should be normal and stabilized and tenure of office on approximately the same basis as in other departments; and, where this is the case, salaries of coaches should be commensurate with salaries paid to men of equal rank in other departments, and should be paid directly by the institution.

(8) All athletic funds should be either regularly audited by or directly handled and disbursed by the institution's business office. All athletic expenditures should be included in the institution's budget.

IN MEMORIAM

As this issue goes to press word was received of the death of Professor HUBERT G. CHILDS of the University of Indiana, a most active member of the Association for many years, and two years ago Secretary of the Commission on Secondary Schools.

Principles Relative to Graduate Work Recognized by the North Central Association

A Report of the Committee on Graduate Degrees

ADOPTED BY THE COMMISSION ON INSTITUTIONS OF HIGHER EDUCATION AT THE ANNUAL MEETING IN 1928, AND APPROVED BY THE ASSOCIATION

The Committee on Graduate Degrees met at Hotel Sherman, Chicago, at 9:00 A. M. November 18, 1927. William McPherson, Dean of the Graduate School of Ohio State University, Walter A. Payne, Recorder and Examiner, University of Chicago, and R. M. Hughes, President, Iowa State College, were present.

The Committee submits the following report for the consideration of the Commission on Institutions of Higher Learning:

Since the standards established by this Association as well as by other similar associations require the members of the instructional staffs to have certain graduate degrees, it follows that the standards represented by these degrees are of prime importance to the Association. Moreover, it is evident that the significance of these degrees in the case of any institution conferring them depends upon the integrity of the institution.

The following specifications and principles are, therefore, recommended:

(A) General Principles:

(1) The degrees generally accepted as graduate degrees in course, A. M., M. S., and Ph. D., should not be conferred as honorary degrees.

(2) Institutions which only slightly exceed the minimum requirements of the North Central Association in equipment

and staff as well as those which are heavily burdened with undergraduate instruction in proportion to staff and resources should expend all their efforts on undergraduate work and should neither offer graduate work nor confer higher degrees.

(3) Institutions conferring graduate degrees should have ample facilities in library and equipment in the fields of specialization in which the degrees are granted.

(4) It is suggested that institutions could increase confidence in the validity of their graduate degrees by inviting a representative of a standard university to sit with examining committees.

(B) The Master's Degree:

(1) The Master's Degree should represent a year of intensive work based on undergraduate specialization in the same field of at least eighteen (18) semester hours in subjects not open to freshmen and of twenty-four (24) to thirty (30) semester hours in subjects like English, History, Chemistry, Mathematics, and Foreign Languages, which are open to freshmen. In fields, such as Bacteriology and Comparative Literature, that require foundation courses in related subjects, graduate work should be preceded by adequate undergraduate training in the related subjects.

(2) It should be impossible to obtain the Master's Degree by the mere pro-

longation of the undergraduate studies through a fifth year.

(3) No institution should confer the Master's Degree in any subject in which the directing professor has not (a) adequate training in his subject and (b) adequate time to supervise graduate work. Generally speaking, the directing professor should have the Ph. D degree or the full equivalent and, to the extent to which he conducts or supervises graduate work, he should be relieved of the normal load of undergraduate instruction.

NOTE: The apparent decline in the standard of the requirements for the Master's degree by some of the recognized universities, as indicated by (a) discarding the thesis requirement; (b) discarding the final examination; (c) granting the degree on four 6-weeks or three 8-weeks summer terms is looked upon with some concern.

(C) The Degree of Doctor of Philosophy:

Ordinarily institutions accredited by

the North Central Association and not members of the Association of American Universities should not confer the Ph. D. degree. Any such institution which does confer the doctorate should be able fully to justify its action.

NOTE: The Association recognizes that there are included within its membership a number of institutions of limited scope which, owing to their form of organization, are ineligible to membership in the Association of American Universities, and yet are doing advanced research work in restricted fields which warrants the conferring of the degree of Doctor of Philosophy.

Wide or frequent departure from the specifications and principles set forth in this report will endanger the standing of the institution in this Association.

Respectfully submitted,

R. M. Hughes, Chairman,
William McPherson
Walter A. Payne.

Faculty Training in the Liberal Arts College

A Report of the Committee on Faculty Scholarship, 1928

At the last meeting of the Commission on Institutions of Higher Education it was voted "that a committee be appointed to investigate and report upon the question of faculty training in all types of higher institutions accredited by the Association, with a view to a possible modification or interpretation of the present standard." In order that the prejudices or point of view of the Committee may be understood, it is perhaps worth while to note that of the three members appointed, one represents a state university, the second, a privately endowed university, and the third an independent college.

When the Committee considered the general scope and plan of its investigation as determined by the resolution of the Commission, it was decided, after careful consideration, to confine our investigation and report to the *liberal arts college*, including, of course, both the independent college and the liberal arts college within the university. In other words, it did not seem wise or possible at this time to include all departments, schools, and colleges. It seemed difficult to the Committee to frame at this time a questionnaire which would be clearly understood and would secure the necessary information for such a comprehensive survey. We decided, therefore, that it would be a much better plan to undertake a study of faculty training in a single department or college throughout the membership of the Association, with the hope that the results of this study might point the way to an intelligent investiga-

tion of other colleges or departments.

Confining our investigation, therefore, solely to the liberal arts college, our first, and perhaps primary, object is to present the facts regarding training of the members of the faculties of the liberal arts colleges in the North Central Association. We shall venture to make a few interpretations and recommendations with the hope that the Commission may be aided somewhat in the practical application of Standard No. 5. Our questionnaire was included in the Triennial Blank, reports being received from all except ten members of the Association. The figures in our report, therefore, represent the conditions of faculty training or scholarship in the liberal arts colleges of the North Central Association with a fair degree of completeness. The Committee presents herewith the complete tabulations and statistical studies which it has made. These figures, it is hoped, will furnish reliable information to other committees and individual investigators who may be interested in the general subject of the training of college instructors. We shall confine ourselves in this general report to the more interesting and significant facts with particular reference to the function of the Committee as defined in the resolution authorizing its appointment.

Let us consider each of the requirements laid down in Standard No. 5, and see how far the liberal arts colleges of the North Central Association meet these requirements.

"The minimum scholastic require-

ments of all teachers," states the first sentence in Standard No. 5, "shall be graduation from a college belonging to this Association, or its equivalent." How far are our members meeting this requirement? Out of 8,743 teachers, including both full-time and part-time teachers, 215 or 2.5% do not have even the bachelor's degree. When one considers, however, that 40 of this number are only part-time teachers, and that many in the group are probably giving instruction in subjects such as physical education where the baccalaureate degree may not always be a vital requirement, the record is not so bad.

The next requirement in the Standard reads as follows: "The training of the members of the faculty of professorial rank shall include at least two years of study, in their respective fields of teaching, in a recognized graduate school, presumably including the master's degree." How far do the members of the Association "toe the mark" of this requirement? Out of 5,686 teachers of professorial rank, 5,001 or 87.9% have at least the master's degree or its equivalent. This is hardly a good record. It would seem that the liberal arts colleges should make a much better showing in the proportion of their professors who have had at least two years of graduate training.

We consider the next requirement of the Standard: "For heads of departments, training should be equivalent to that required for the Ph. D. degree, or should represent the corresponding professional or technological training." Here the showing is far from favorable. Out of 2,613 heads of departments in the liberal arts colleges, only 1,303 or 49.8% have the doctor's degree or its equivalent. Throughout the membership of the As-

sociation, therefore, only about one-half of the heads of departments in the liberal arts colleges meet the standard of training set by the Association.

The last two sentences of the Standard read as follows: "The teacher's success shall be determined by the efficiency of his teaching as well as his research work. A college should be judged in large part by the ratio which the number of persons of professorial rank with sound training, scholarly achievement, and successful experience as teachers, bears to the total number of the teaching staff." Our investigation hardly enables us satisfactorily to apply this test to the members of the Association. To do so, we should have to secure reliable information, for example, regarding the actual teaching experience of members of the faculties, which is by no means an easy task. We find that out of the total teaching staff of 8,743, 5,686 or 65% are teachers of professorial rank, but of these professors of all ranks, only 87.9% have, as already noted, at least the master's degree or its equivalent, and only 46.7% the doctor's degree or its equivalent.

We call attention to a few other significant facts presented in the statistical tabulations. Of the total teaching staffs of our liberal arts colleges, 36.8% are full-time professors; 10.6% full-time associate professors; 17.7% full-time assistant professors; and 23.7% full-time instructors. Of the total teaching staffs, 33.9% have the doctor's degree or its equivalent. In addition to the facts already mentioned regarding heads of departments, it may be noted that of the total heads of departments, 90.5% have at least the master's degree or its equivalent, although there are in this high professorial group nearly 10%

with only a bachelor's degree or less preparation. Of the total full-time professors, 56.4% have the doctor's degree or its equivalent, and 92.3% at least the master's degree of its equivalent. Of full-time associate professors, 49.9% have the doctor's degree or its equivalent, and 86.6% at least the master's degree or its equivalent. Of total full-time assistant professors, 29.8% have the doctor's degree or its equivalent, and 79.8% have at least the master's degree or its equivalent. In the group of total full-time instructors, 9.2% have the doctor's degree or its equivalent while 55.6% have at least the master's degree or its equivalent.

It seemed to the Committee that it might be of some interest and importance to discover how each of the two classes of institutions—the university and the college—are meeting certain of the requirements in the Standard on Faculty Training. One wonders naturally whether there is any marked difference in the extent to which each of these two classes are meeting the requirements of Standard No. 5. The Committee hesitated to undertake the delicate task of distinguishing between colleges and universities, but believing that some information about conditions of faculty scholarship in each of these institutions might be of value to our study of the problem, we have somewhat arbitrarily selected 23 representative universities and 35 representative colleges as the basis of our comparisons.

The following results are disclosed in this tabulation. In the universities, 72.4% of the full-time heads of departments have the doctor's degree or its equivalent, while in the colleges, the percentage is 49.8%. In the universities, 82.4% of the full professors have the doctor's

degree or its equivalent, while in the colleges, 55.4% of the full professors so qualify. Taking the total teachers of professorial rank, 89.2% have at least the master's degree in the universities, while in the colleges, the percentage is 93.2. Thus, except in the matter of master's degrees or its equivalent, the colleges make decidedly a poorer showing than the universities.

We allow ourselves in conclusion to make a few general comments and recommendations. Whatever may be said about teachers in the graduate schools or other schools and colleges, certainly the test of success in the liberal arts college must be efficient teaching. The question may therefore fairly be asked: how far do degrees, either the master's degree or the doctor's degree, give assurance of teaching ability? May the doctor's degree, in other words, be taken as a fair assurance of that "sound training, scholarly achievement, and successful experience as teachers" mentioned in the final sentence of the standard of faculty training? If that degree gives any such assurance, it is obvious that instruction in the liberal arts colleges of the North Central Association must be poor, for not even one-half of those chiefly responsible for the work of their departments have the degree. But we know, of course, that the situation is not so bad as it seems, for the degree means little so far as being a guarantee of "successful teaching experience." Not only that, but it signifies hardly more so far as general aptitude for college teaching is concerned. One need hardly emphasize the fact that our graduate schools have thus far done little or nothing towards preparing in some direct way their Doctors of Philosophy for the vocation which most of them have in view. How much

does the degree mean in connection with the other elements mentioned in the final sentence of the Standard—sound training and scholarly achievement? Of course it all depends upon what one means by "sound training and scholarly achievement." If, by "sound training," is meant good preparation for effective teaching, the degree, as just noted, does not give much assurance. However, "sound training" probably implies something more than merely direct training in the technic of college instruction. The person of alert intelligence and good personality who has himself made real achievement in his studies, has certainly in that very experience received "sound training." How about the degree as an assurance of scholarly achievement? Although it would be easy to argue and probably prove that a majority of Ph. D's are not real scholars, still the degree does give an assurance of a certain amount of knowledge and a certain training in study and methods of investigation, which are essential to the success of every college teacher.

We must therefore admit that, until our graduate schools give more attention to the specific training of their students for the vocation of college teaching, the degrees of Ph. D. and A. M. give little guarantee of success in teaching. But is there at present any better objective test which the Association can apply? We doubt it.

Our Committee, therefore, does not at present recommend any change in the statement of the standard on faculty training, at least not so far as the liberal arts college is concerned. Until someone devises a fairer test than the degrees of bachelor, master, and doctor applied intelligently and reasonably, we would not recommend any change in the

phrasing of that standard. If the Association wishes to accomplish something worthwhile in the promotion of more effective teaching in our liberal arts colleges, it can best do so, in our opinion, not by changes in the present statements of the Standard on Faculty Training, but by joining the movement to encourage graduate schools to give more training in the methods and technic of college instruction to those students who expect to go into the field of college teaching.

It does seem to the Committee that the proportion of heads of departments who have the doctor's degree or its equivalent is too low. If the degree means anything in connection with effective college teaching, it would seem that something should be done to encourage members of the Association gradually to increase the number of heads of departments who have really completed their post-graduate training. Perhaps to insist that at least two-thirds of the heads of departments in any liberal arts college should have the doctor's degree or equivalent, would not be unreasonable, and would leave sufficient recognition of the fact that many men without the degree are most capable college teachers.

We are firmly convinced that the Association or the Commission should take effective steps to encourage institutions to increase the number of teachers of professorial rank who have at least the master's degree or its equivalent. This percentage should increase from the present 87.9% well towards the 100% goal.

Perhaps it may be well for the Commission to instruct its secretary to correspond with those liberal arts colleges, the training or scholarship of whose faculties seems clearly below the average. A clear statement to these institutions that they fall below the average and a

suggestion that they are expected to improve this condition, may suffice as a preliminary step to be taken during this coming year. The Committee believes that the whole subject of Faculty Training deserves further investigation and consideration, preliminary to more posi-

tive strenuous action.

Respectfully submitted
(SIGNED)

C. S. Boucher

K. C. Babcock

C. H. Rammelkamp,
Chairman.

Faculty—Training

Number of Institutions Reporting—163

		Full Time Profs.	Full Time Assoc. Profs.	Full Time Asst. Profs.	Full Time Instrs.	Full Time Other Ranks	Part Time All Ranks	Total	Grand Total
(1) Number with doctor's degree (not honorary) or equivalent training	Heads of Dep'ts	1,233	16	12	6	2	34	1,303	
	Others....	581	363	448	185	15	73	1,665	2,968
(2) Number with two years of graduate training	Heads of Dep'ts	323	11	13	6	.....	3	356	
	Others....	55	64	100	55	1	24	299	655
(3) Number with master's degree (not honorary) or equivalent training	Heads of Dep'ts	574	38	37	43	.....	13	705	
	Others....	200	311	622	857	68	194	2,252	2,957
(4) Number with bachelor's degree or equivalent training	Heads of Dep'ts	148	11	24	27	3	13	226	
	Others....	89	97	251	796	143	346	1,722	1,948
(5) Number with less than bachelor's degree	Heads of Dep'ts	10	2	5	6	.....	.....	23	
	Others....	2	14	32	90	14	10	192	215
(6) Total staff as limited above	Heads of Dep'ts	2,288	78	91	88	5	63	2,613	
	Others....	927	849	1,453	1,983	241	677	6,130	8,743

Ratio of Ranks to Total of Teaching Staffs

Total of Teaching Staffs, Full-Time and Part-Time, 8,743

Number who are:

Full-time faculty members	8,003	91.5 %
Part-time faculty members	740	8.5 %
Full-time heads of departments	2,550	29.2 %
Full-time professors	3,215	36.8 %
Full-time associate professors	927	10.6 %
Full-time assistant professors	1,544	17.7 %
Full-time instructors	2,071	23.7 %
Full-time other ranks	246	2.8 %
Part-time heads of departments	63	.72 %
Part-time other ranks	677	7.7 %

Ratio of Degrees or Training to Total of Teaching Staffs

Total of Teaching Staffs, Full-time and Part-time, 8,743

Number with:

Doctor's degree or equivalent	2,968	33.9 %
Two years of graduate training.....	655	7.5 %
Master's degree or equivalent.....	2,957	33.8 %
Bachelor's degree or equivalent.....	1,948	22.3 %
Less than bachelor's degree	215	2.5 %

Training of Heads of Departments

Total Heads of Departments, 2,613

Number with:

Doctor's degree or equivalent.....	1,303	49.8 %
Two years of graduate training.....	356	13.6 %
Master's degree or equivalent.....	705	27. %
At least master's degree or equivalent.....	2,364	90.5 %
Bachelor's degree or equivalent.....	226	8.6 %
Less than bachelor's degree.....	23	.88 %

Training of Various Ranks of Teachers

Total Full-Time Professors, 3,215

Number with:

Doctor's degree or equivalent.....	1,814	56.4 %
Two years of graduate training.....	378	11.8 %
Master's degree or equivalent.....	774	24.1 %
At least master's degree or equivalent.....	2,966	92.3 %
Bachelor's degree or equivalent.....	237	7.4 %
Less than bachelor's degree.....	12	.37 %

Total Full-Time Associate Professors, 927

Number with:

Doctor's degree or equivalent	379	40.9 %
Two years of graduate training.....	75	8.1 %
Master's degree or equivalent.....	349	37.6 %
At least master's degree or equivalent.....	803	86.6 %
Bachelor's degree or equivalent.....	108	11.7 %
Less than bachelor's degree.....	16	1.7 %

Total Full-Time Assistant Professors, 1,544

Number with:

Doctor's degree or equivalent.....	460	29.8 %
Two years of graduate training.....	113	7.3 %
Master's degree or equivalent.....	659	42.7 %
At least master's degree or equivalent.....	1,232	79.8 %
Bachelor's degree or equivalent.....	275	17.8 %
Less than bachelor's degree.....	37	2.4 %

Total Full-Time Instructors, 2,071

Number with:

Doctor's degree or equivalent.....	191	9.2 %
Two years of graduate training.....	61	2.9 %
Master's degree or equivalent.....	900	43.5 %

At least master's degree or equivalent.....	1,152	55.6 %
Bachelor's degree or equivalent.....	823	39.7 %
Less than bachelor's degree.....	96	4.6 %

Total Full-Time Other Ranks, 246

Number with:

Doctor's degree or equivalent.....	17	6.9 %
Two years of graduate training.....	1	.41 %
Master's degree or equivalent.....	68	27.6 %
At least master's degree or equivalent.....	86	34.9 %
Bachelor's degree or equivalent.....	146	59.3 %
Less than bachelor's degree.....	14	5.7 %

Total Part-Time Faculty Members, All Ranks, 740

Number with:

Doctor's degree or equivalent.....	107	14.5 %
Two years of graduate training.....	27	3.6 %
Master's degree or equivalent.....	207	28. %
At least master's degree or equivalent.....	341	46.1 %
Bachelor's degree or equivalent.....	359	48. %
Less than bachelor's degree.....	40	5.4 %

A Few Tabulations for Universities and Colleges

BASED ON 23 REPRESENTATIVE UNIVERSITIES AND 35 REPRESENTATIVE COLLEGES

Proportion of Full-Time Heads of Departments With Doctor's Degree or Equivalent

UNIVERSITIES:

Total heads of departments.....	315
Total heads of departments with doctor's degree or equivalent.....	228—72.4 %

COLLEGES:

Total heads of departments.....	580
Total heads of departments with doctor's degree or equivalent.....	289—49.8 %

Proportion of Full-Time Professors Who Have Doctor's Degree or Equivalent

UNIVERSITIES:

Total full professors.....	678
Total full professors who have doctor's degree or equivalent.....	559—82.4 %

COLLEGES:

Total full professors.....	603
Total full professors who have doctor's degree or equivalent.....	334—55.4 %

Proportion of Teachers of Professorial Rank With at Least A. M. Degree or Equivalent

UNIVERSITIES:

Total teachers of professorial rank.....	1,431
Total teachers of professorial rank with at least A. M. degree or equivalent.....	1,277—89.2 %

COLLEGES:

Total teachers of professorial rank.....	914
Total teachers of professorial rank with at least A. M. degree or equivalent.....	852—93.2 %

Salaries

	Full-Time Profs.	Full-Time Assoc. Profs.	Full-Time Asst. Profs.	Full-Time Instrs.
Average minimum salary-----	\$2,692.60	\$2,467.92	\$2,049.04	\$1,571.94
Average maximum salary-----	3,960.15	3,167.14	2,760.00	2,270.08
Average salary -----	3,280.47	2,829.67	2,388.21	1,915.47

The Organization of Teaching Units as a Problem for the Commission on Unit Courses and Curricula*

WILLIS L. UHL

UNIVERSITY OF WISCONSIN

One of the purposes of the North Central Association is "to consider common educational problems and to devise the best ways and means of solving them." This generous purpose not only gives sanction to a study of classroom problems, but also delegates to the officers of the Association the responsibility of improving instruction—if "ways and means" can be found for such improvement. If, therefore, the organization of teaching units would lead to an improvement in classroom practices or if the members of the Association believe that such units would lead to such improvement, the legitimacy of the undertaking is clear.

Certain dangers attend so definite an undertaking as this, and, because of these dangers and also because of the difficulty of the task, neither the Association nor its Commission should attempt to organize teaching units unless the need for such units is both clear and pressing. One may, therefore, ask (1) what is meant by a teaching unit, (2) how many units are to be proposed for each school subject, (3) how valid such units are as bases for teaching procedures, and (4) how such units can be developed and broadcast by the Commission.

Before these points are discussed, at

least one danger should be considered. That is, the danger of treating a matter about which all educators have a considerable amount of knowledge and about which certain educators have a strong emotional bias. So long as the North Central Association confines its research to harmless matters, no one's feelings are injured and the educators of our large territory can remain complacent about our findings. For example, if the Association should send a questionnaire asking professors of education to name from five to ten general objectives of education, no one would fear the results of the research. That is, a study of the present status of these professors' opinions would be so far removed from probable practices or changes in practice that the findings would cause little, if any, mental irritation. The North Central Association may have conducted such innocuous researches, but it has been distinguished rather for attempting to treat matters which directly affect opinions and practices. And, by doing so, the Association has brought adverse criticism upon itself.

By its experience with encroachments upon thought and practice the Association has discovered a few principles of research. It has found, on the one hand, that there is no danger in discussion or investigation (1) as long as the issues involved are kept at a safe distance from

*An address delivered before the Commission on Unit Courses and Curricula in Chicago March 14, 1928.

practice, or (2) as long as the discussions are in terms which are so general and indefinite that the members of no group interpret them in the same way or care anything about them. The Association has found, on the other hand, that investigations are dangerous (1) when they are certain to affect practice, and (2) when they involve intelligible matters. For example, there was no danger in sight several years ago when a group of this Commission was delegated to formulate the general objectives of secondary education. It was only after the same delegates and other members of the Commission interpreted the objectives in terms of definite materials that danger came into view. It was then clear that classroom practices were the target of the Commission. Since danger has been sighted when objectives have touched only the materials of instruction, one may be certain that greater danger will arise if the Commission suggests activities which affect classroom practices.

The necessity for deciding whether or not we shall treat classroom practices has grown out of an Association resolution passed fifteen years ago. It was then resolved that "a committee of at least seven members be appointed by the President of the Association . . . to provide for the general revision of unit definition for secondary school work".¹ Among the first fruits of the resolution was a comprehensive investigation by Koos of the administration of secondary school units. In his report upon this matter Koos pointed out the impossibility of treating units solely upon a quantitative basis. The "touch with life", that is the qualitative issue, was, he asserted, inevitably

a necessary consideration in the administration of units.² To provide this "touch with life" our omission was delegated to formulate qualitative standards. That formulation has been tentatively completed for many school subjects. The present proposals is that teaching units be developed to show what to do with the standards. The traditions of militancy of the North Central Association warrant an invasion of practices and the realm intelligibility, and we should, therefore, face the dangers involved and proceed upon our next difficult task.

We may define and outline our proposal. First, by teaching units is meant a logically organized series of teaching and learning activities held together by a central text or topic. Such a unit is usually comprehensive enough to engage pupils for from one to six weeks. The character and length of a unit appears to to vary somewhat with teachers and departments of knowledge. The unit usually consists of several divisions, such as introduction or overview, assignments, mastery of basic essentials, a long period of extensive work, a short period of organization or recapitulation, and finally a period of measuring the progress of the pupil.

Second, the number of such units which the commission should prepare depends upon the use that is to be made of them. Besides, certain departments are already supplied with textbooks organized upon the basis of units. If principals and supervisors desire only to illustrate the unit plan to the teacher and then to allow the teacher to develop additional units fairly independently, not more than one or two units are needed

¹Proceedings of the Nineteenth Annual Meeting of the North Central Association of Colleges and Secondary Schools, 1914, pp. 117-118.

²Koos, L. V., *The Administration of Secondary School Units*. University of Chicago Press, 1917. pp. 184-187.

in each department. The sample units should, however, be so developed as to illustrate clearly how both general and specific aims of education can be provided in a single unit.

Third, the validity of the fairly long, well directed unit appears to have been established by Morrison, Beauchamp, and others. Furthermore, the relatively long period of extensive study within the unit admits of necessary differentiation of work to meet the significant individual abilities, interests, and need of pupils. The empirical judgments upon this procedure extend over several centuries and have been expressed by leading publicists and educators. The failure to show considerable advantages of the long unit procedure by means of standardized tests has sometimes been attributed to the formality of the tests. Miss McCoy, for example, has indicated means for validating pupils' work by measurements which fall outside the usual realm of standardized tests.³

Fourth, teaching units can be developed by the Commission by enlisting the cooperation of superior teachers who are already using such procedures. It is unlikely that the Commission would object to minor modifications by such teachers of the formula of objectives upon which our reports have been based. If such units can be so developed, the Association's *Quarterly* might properly be asked to publish them for the use of teachers and supervisors.

In conclusion, the arguments favoring the organization of teaching units seem to rest chiefly upon the need for clear, printed illustrations and accompanying discussions of this procedure. The procedure should be illustrated for all departments and in terms of objectives as comprehensive as those which the Commission has adopted. The history of education shows that superior teachers have for centuries talked about such units, but that only limited use has been made of them. Indeed, little, if any, progress has ever been made in education without attention to the details of progress. Even printed units will have little value, however, unless principals and supervisors direct their use and follow up their application. The Commission has attempted to complete its statement of objectives by showing how they can be attained. So far the attempt has led to the amassing of innumerable details which have already been criticised as simply adding to the confusing burden of pupils and teachers. These details will continue to bewilder many teachers unless our reports are skillfully handled. We may expect many teachers to revert to eighteenth encyclopedism unless we show them how to use our reports. Only when bound together by the integrating force of long unit procedures can the items of our report be encompassed by pupils. We now have a vast cooperative agency for the dissemination of plans for educational progress. We should consider the development of teaching units as one of our important educational problems and devise the best ways and means of solving this problem.

³Reavis, W. C. *Studies in Secondary Education, II. Supplementary Education Monographs*, No. 26. Department of Education, University of Chicago, 1925. p. 71 ff.

In What Way May a Scientific Study of Teaching Technique Contribute to the Quantitative Determination of Units?*

By H. H. RYAN

UNIVERSITY HIGH SCHOOL, ANN ARBOR, MICHIGAN

The entire discussion of the day up to this point serves as a very convenient background for what I have to say. As another speaker has told you, this particular committee has been engaged for some time in attempting, first, to set up certain objectives for secondary education, then to find in the subject matter of various high school subjects illustrations of uses to which this subject matter may be put by way of serving these objectives. The Committee has now reached a point where it is expected to make some recommendations as to the selection of subject matter. Such a duty involves quantitative considerations. Up to this point the main question has been: What kind of material will serve the objectives which the Committee has approved? Now the question is something like this: How much material is necessary to accomplish these objectives and how much is it reasonable to expect high school children to do in the time specified for the purpose? It is my business to indicate how this attempt to set up quantitative standards may be aided by a scientific study of teaching technique.

Of course the futility of an attempt to cover this subject in twenty minutes is obvious. I will be excused, I am sure then, if I do not attempt a carefully

organized treatment of the subject but content myself with three or four references which seem to me to be pertinent.

First I believe that it will be helpful to study in scientific fashion the seriousness of the kind of assignment traditionally made. Whatever the method of teaching to which you subscribe, it is agreed by all that a certain amount of independent work on the part of high school students is desirable. There is something to be gained by setting out amounts of work which the pupil is expected to do without aid from any one. For an estimate of the amount of work that pupils may reasonably be expected to do in the amount of time at their disposal, must teachers are inclined to depend upon their own subjective notions, often hastily formed. Probably the error is usually on the side of severity; that is, too much is assigned to be done. In the cases where this is true several things happen. A few conscientious people, usually girls, try to do all that is assigned, without reference to the amount of work and energy required and the amount of leisure time thus invaded. The majority, on the other hand, assume a *laissez faire* attitude and are inclined to feel that if they cannot get all of it they might as well get only that part of it which is comfortable to get. The individuals of this group take refuge in

*A paper presented before the Commission on Unit Courses and Curricula in Chicago, March 14, 1928.

mob psychology, being able to convince themselves and sometimes other persons that there is no use attempting to do what nobody does. An illustration of this problem is found in the use of the sixty-minute hour. Undoubtedly the tendency in schedule making for high schools is toward the long hour. The universal comment from those persons who have opportunity to judge through observation the efficiency with which this long period is used is to the effect that the period itself is regarded by the teacher as a more comfortable time in which to do the former forty-minute job. There has not been the prophesied reduction in pupil load nor increase in the efficiency of study habits as a result of the longer time under the supervision of the teacher. To relate this paragraph to my topic, let me say that it is obvious that a scientific study of the use of the sixty minute period is going to be necessary before we can judge how much work a pupil can be expected to do in a given subject in a school with a schedule so organized.

To answer quantitative questions with regard to the teaching of foreign languages, for instance, it is necessary that something be done to determine the amount and distribution of drill necessary for the proper retention of anything presented. It is evident that the bright pupil and the slow pupil take opposite attitudes toward drill. The slow pupil is inclined favorably toward this form of exercise and seems willing to continue it for any definite period. When he finds something that he can do successfully he seems so pleased with the success which comes, that he is quite willing to repeat the process over and over for the pleasurable feeling that success brings. The brighter pupil on the other

hand is inclined to shirk drill. He is in search of a new experience for every minute, and the going over and over of a given exercise for any purpose whatever is quite distasteful to him. Each of these groups will have to be influenced by the school as to the amount of drill in which it engages. Pupils will have to be taught how much drill is necessary in their own cases to insure learning. A school principal finds numbers of cases of pupils who do not know that it is economical to drill themselves upon vocabulary. Few have hit upon the writing down of new words of a foreign language encountered during their reading and of strengthening the bond between the foreign word and the idea by repeated attention to the combination. It is certainly true that many pupils look up the same word over and over again in the same ten pages. Certainly qualitative standards in the study of foreign languages cannot be determined without some reference to economies that can be effected in the making and strengthening of bonds.

One contribution which the scientific study of teaching technique always makes to any field of teaching is that of forcing a consideration of the objectives. This calls for the establishing of criteria for determining the value of materials taught. In thinking of quantities there is always the question as to what might just as well be left out. When you and I went to school we studied something we called "common fractions." I have been very much interested in studies made by Mr. Schorling and others on the subject of "uncommon fractions." They have discovered for instance that there are some fractions to which we might just as well pay no attention whatever, since they have occurred very

infrequently in practice. The handling of some fractions is pretty good practice in abstract mathematics but as a practical matter in preparation for a mathematical situation in future life it amounts to nothing. It is astonishing how few and how simple are the fractions which make up the bulk of that type of mathematical experience.

Another illustration of this same principle is found in the question as to the amount of rigorous demonstration which is necessary to insure all benefits which the study of demonstrative geometry can give. Is it necessary for instance to devote a year's time to the study of plane geometry? Could we on the other hand get all the training in deductive reasoning and in the use of logic in the abstract and at the same time familiarity with space considerations and space relation in half the time? Could we not do in the tenth grade the whole of plane geometry and solid geometry, in one year? Again, how much reading is necessary to accomplish the things we want in English? We assign a five hundred page book to be read in a certain time. Could the same results be accomplished by reading certain selections from that book and by having other parts of the book commented upon? Compare two sets of examination questions prepared by two teachers of the same grade in the same school in the same year. One asks a number of questions calling for detailed information retained from the reading of a piece of literature; the size and shape of the hall in which a certain banquet was held, the name, names and descriptions of certain characters, detailed accounts of certain petty incidents. The other examination asks the pupil to tell which of the poems he has read in the last year are most intimately tucked

away in his heart. Two or three poems, supposedly new to the pupil, are given in full; he is asked to describe his reaction to them. If these two teachers are actuated by the same purposes in the teaching of the English of that grade is there any evidence to show it?

How many formal experiments are necessary in Physics to bring about the desired familiarity with the principles and the facts of the subject? Teachers of Physics in schools which operate on the sixty minute schedule are experiencing some difficulty in getting done what they think should be done in a year's time. They say that the one hour period is too short in itself to permit proper experimentation. Just what does the teacher expect to get or to have the pupils get from the experience? It is certainly something which is beyond, or back of, or greater than the ability to recite certain principles and certain facts. That something should be defined, and methods of detecting its possession should be determined. The thermometer, for instance, can be studied from the point of view of what we find it to be today, or, on the other hand, it can be studied from the point of view of the evolution of a device to indicate temperature. The problems and the hypotheses of the persons who first set up something like a thermometer, the manner in which they determined the fixed points, the manner in which they set up the graduation, and so on, might constitute one method of approach. Which of these two is better? Which will produce the type of effect we hope the subject to have upon pupils?

The scientific study of teaching technique will enable teachers to appeal more and more to interest. In hoping for this I have in mind not so much an easier

time for the pupil but a greater willingness on his part to spend time upon study. It is an unfortunate fact that at the threshold of secondary school education pupils begin to look upon school work as a task to be done or as medicine to be taken. They institute in their own minds a rather rigorous accounting system by which they are conscious at all times of the amount of time we are demanding from them. There are teachers, however, whose assignments are not subjected to this kind of scrutiny by the pupil. These assignments are hitched on to the interest of pupils in such a way that there is no disposition on the part of the child to stop when the time is up. The pupil who prepares an illustrated notebook on *Ivanhoe*, having recourse to all sources of information and opportunities for exploitation which are within his reach, is likely to spend hours at it, with the question of time entirely eclipsed in his own mind by that of doing a good job. The mathematics pupil who illustrates the study of the graphic portrayal of mathematical facts by preparing a circle graph in which he shows the proportion of a boy's ideal man furnished by Lindbergh, Babe Ruth, Jack Dempsey and other celebrities, does not watch the clock.

While I began this talk by suggesting that we ought to know something about

how much anyone of our assignments is going to call for in the matter of time consumed, I am closing by saying that we ought to be able to teach in such a way as to make the pupil go away from the classroom with certain yearnings and certain impulses which will cause him to be quite prodigal in the use of his time in the pursuit of the subject.

There are at least two kinds of parents with whom we have to deal. I mean there are two which are quite distinctive. There is one who says: "I wish you would take pains to assign enough home work to keep my boy busy in the evening and keep him off the streets." That parent wants us to be a kind of nurse or governess by absent treatment. Then there is the other who wants his children's evenings to be free in order that the family may engage in something which is of interest and supposedly of profit to them. One parent wishes to study Shakespeare with his twin girls; another wants an hour or so in the evening for the entire family to study the geography of the route of the next summer's automobile trip. I believe the wishes of these two kinds of parents can be harmonized and can be served by the same teacher with the same assignments. I believe we cannot hope to achieve this without the scientific study of the technique of teaching.

Efficiency of Teacher Placement Agencies

BY GEORGE W. WILLETT, LA GRANGE, ILLINOIS

(*A Committee Report*)

PART I

This committee was appointed after the annual meeting in 1926 by the President of the Association as a committee under the general association. It entered upon certain investigations in the year 1926-1927 but could give only a brief report of progress at the time of the 1927 meeting. The report today is given in dual form. There are placed in your hands certain summaries of data which bear upon the other part of the report which the speaker is now presenting.

Our committee early decided upon two distinct investigations out of the many possible ones. The first was to seek information from placement bureaus of colleges, universities, and other public or semi-public organizations. The second was to investigate the policies which are followed by public schools when new teachers are needed. At the outset it may be well to state that in dealing with the materials and data secured from these two opposite poles of the teacher employment field, it was found that in virtually every case the evidence submitted by the one only served to emphasize the conclusions drawn from the other. The committee was offered the privilege of using the files and other documentary evidence of certain of the private agencies and for a time expected to accept the offer but did not because the data from the other two sources seemed to be sufficient and were in perfect accord with verbal statements made to individuals of the com-

mittee by representative members of the National Association of Teachers' Agencies. Mr. A. W. Youngblood who has done much of the committee's work may use some private agency material in his master's thesis which he is developing from our material.

I

Let us look at the information secured from the public placement bureaus or near-bureaus. Requests were sent to all colleges and universities of the North Central Association in the summer of 1926. Replies were received from eighty of these institutions. This number included a wide range of institutions, both private or denominational and public or state institutions. The enrollments varied from less than 200 to more than 10,000. A large share of those answering, evinced an interest in the matter and many wished to receive the returns from the investigation. Many letters giving high points of success or the lack of it, were perceived. Fifty-four institutions—22 public and 32 private or denominational submitted blanks of one sort or another. Several institutions reported that there was no bureau as yet but most of these were planning such a bureau for the near future. No institution of any considerable number in its graduation class gave any indication that it felt that the problem of placement was being adequately met.

A

There were certain points brought out

in the letters which were worthy of note. For instance the following list of difficulties as tabulated from the letters is enlightening to say the least:

1. To find sufficient vacancies to permit the bureau to promote deserving alumni. 1.

2. Positions are not open to inexperienced candidates. 3.

3. To find enough vacancies for those graduating. 6.

4. Uncertainty as to what individual has the authority to hire teachers. 1.

5. Students have elected subjects which do not meet the calls from the field. 3.

6. To discover how to make contracts with superintendents and principals. 4.

7. Detailed information not sufficient as to type of vacancy. 3.

8. To compete with commercial agencies. 3.

9. To secure cooperation of the faculty of the institution. 2.

10. To supply persons with the peculiar combinations of subjects which are demanded by the employer. 2.

11. Lack of ethics of *private* agencies. 3.

12. To choose the right person to serve best in the community. 2.

13. To know when candidates have accepted a position. 2.

14. Religion—To place Jews and sometimes Catholics. 1.

15. To secure a competent director for the bureau. 1.

16. To insure that confidential records remain confidential. 1.

17. To predict teaching success on the basis of college records. 1.

18. To know the personality of candidates so as to recommend wisely. 1.

19. To keep track of certification requirements of near-by states. 1.

20. Lack of clerical help in the "rush" months. 1.

No comments are necessary at this point. In later recommendations, the committee will have occasion to refer to certain of these difficulties. An interesting excerpt from one letter was as follows: "Our experience has been that the greatest number of failures by far, may be traced to deficiencies in personality as distinguished from those in scholarship and teaching methods." This bureau is attempting "to learn enough as to the strong and weak points of personality in our young people to make definite statements concerning them safe and reliable." A letter from another institution declares: "We are especially interested in getting accurate information before prospective employers. As a part of the public-school system of the state, we feel that it is our duty to serve the school boards as well as to serve our students." It is indeed interesting to note that these were the only letters which gave any indication that the bureau represented by the writer considered itself in any way a service agency for the public school or the employer. The sole purpose of the bureau in virtually every case, where letters were written, evidently was that of placing its product and thus in maintaining a record amongst its student clientele.

Furthermore, it was indeed interesting to note that only a few out of the eighty institutions have any sort of check-up or follow-up on the success of their alumni. The University of Iowa and St. Olaf College are good illustrations of two institutions which do attempt extensive follow-up work. The importance of this matter is evidenced by the criticism which superintendents and principals make when they declare that institutional bureaus are usually lacking in candidaes

where "experience" is necessary. Incidentally, such positions usually carry good salaries.

The colleges and universities of the state of Michigan have adopted a uniform blank for notice of vacancy which is sent to any or all of the institutions and apparently may allow for an interchange of candidates. Certain institutions in other states have an agreement whereby, calls which one cannot fill are referred by it to another co-operating institution.

One institution calls attention to the need for a competent director. Here we may well raise a question. Can an institution afford to put in charge of its placement bureau, anyone except someone with a good personality, a good education, an individual who knows the public school, and if it is to place men, anyone other than a keen *business man*? Few persons about an institution come as directly in contact with the public as does the placement director.

B.

An analysis of the blanks and data offered to the would-be employer was attempted. Much of the material could be classified easily but some only arbitrarily. The reason for attempting this classification was to discover what the probability was of a superintendent actually finding desired information about a candidate or of being able to judge between two or more candidates from the information made available by the same or different institutional agencies. Certainly if a bureau is to be efficient it needs must be able to furnish in usable and interpretable form, data on those whom it endeavors to place. Consequently, the various types of blanks were analyzed. They varied in size from that of a postcard to voluminous sets of documents on

which as much as six cents were required for postage. Strangely enough some of the larger sets had little if any more in them than did some of the smaller ones.

As was indicated earlier, there were 22 state institutions and 32 private or denominational institutions which furnished such material. These materials were arranged under four main headings as follows: "Personal and miscellaneous", "Training," "Experience" and "References". In the tabulated material which has been furnished, you will see how many times each item apparently occurred.

Some of these items are especially interesting. Why should color of hair and color of eyes be of especial importance in choosing a teacher. Note how many schools ask about personal appearance which is the easiest thing possible for the employer to size up for himself. See how few actually furnish any testimonial as to the character of the candidate. It was interesting to note that certain combinations of characteristics were considered synonymous by one institution while some other institution would have the same terms not synonymous to each other but synonymous with altogether different terms. May there not be some significance under "references" in the fact that student chosen professors and general references are the source of testimonials? Is there any wonder that certain superintendents and principals insisted that they could not depend on testimonials received from either institutional or private bureaus? One school insists on a rating from every department in which the candidate has had any college work. Under "Training" it was indeed startling to discover that only 28 out of the fifty-four institutions apparently reported the "major" and 25 the "minor" subjects pursued in college. Only six gave the

"major" work and ten the subjects taken in high school. Sixteen gave the graduate subjects and twenty-nine the undergraduate subjects taken by the candidate. Only four show the success in each college subject while six indicate general scholastic success. Apparently, either the North Central is asking too much of the administrators when it urges that new teachers be assigned work only in the field of their major or minor subjects or else placement bureaus are failing to keep up their share of the burden of progress. Likewise, in insistence on mastery of subject matter to be taught on the part of those permitted to teach, the educators are again making demands which necessitate that the bureaus should make available the rating in scholastic success.

Certain outstanding fact loomed all the way through the attempt to analyze the material. Those were the utter dissimilarity of material, of facts called for, of methods of setting forth data, in many cases, the utter lack of arrangement so as to emphasize important facts, and in many cases the poor general arrangement of blanks. A few hours cooperation on the part of representative of similar institutions could certainly furnish blanks on which the data would be at least comparable as to what was attempted. At present, a potential employer may be and probably is compelled to look over two or more pages of printing of various sized type in order to find important items, on any candidate. If there are candidates from two or more institutions, his job becomes more difficult because the common items are found in various different places and connections and many items are not common. The Chairman of this committee seriously considered displaying some of the multifarious varieties of so called blanks but decided not to do

so because it might not be fair to some institutions. What items do belong on a blank and where do they belong? The committee does not know but does feel that there should be some attempt at uniformity. In several instances, the blanks gave evidence that the bureau is manned by some one with little or no knowledge of what constitute essential factors for success in those whom they endeavor to place. The series of blanks submitted and in some cases the letters give ample evidence that there is great need of reform in many institutional bureaus if they are to compete successfully with concerns which are run from the commercial standpoint. A commercial agency, if run on the basis of many of the institutional bureaus would go into bankruptcy in a few months. In many cases the institution's standing because of its alumni and friends, really places the graduates rather than does the bureau.

II

The second part of the investigation consisted of an inquiry as to the sources from which high schools of the North Central Association secure their teachers. The following letter was sent out to approximately 1700 high school superintendents or principals, in December, 1926

City	State
Dear Sir:	

At the last annual meeting of the North Central Association of Colleges and Secondary Schools, a special committee was appointed to make an investigation of the efficiency of Teacher Placement Agencies, public and private. The committee has gathered considerable materials from higher institutions of the Association. It is now desired to secure

data from the high schools of the Association. Will you please answer the following questions to the best of your ability and return at once to G. W. Willett, La Grange, Illinois:

1. Rank in order the following sources from which you obtained new secondary teachers for the year 1926-1927:

- (a) Private Teachers' Agencies.
- (b) Placement Bureaus of Educational Institutions.
- (c) State Placement Bureaus.
- (d) State Teachers' Association Bureaus.
- (e) Unsolicited personal applications by candidates.
- (f) Active search for desirable candidates.

2. (a) In what respects have you found the services of Private Teachers' Agencies satisfactory?

(b) In what respects have you found their services unsatisfactory?

(c) In what respects have you found the services of Educational Institution Bureaus satisfactory?

(d) In what respects have you found them unsatisfactory?

3. (a) What source do you usually notify first when vacancies occur?

(b) Do you await answer from that source before inquiring elsewhere?

4. What improvements might be made in the system of Teacher Placement attempted by Educational Institutions? For example:

(a) In types of recommendations which are made?

(b) In facility or speed of getting information?

(c) In economy or co-ordination among placement agencies?

(d) In other respects?

G. W. Willett, Chairman.

Signature of official replying

Usable responses were received from 853 schools distributed throughout the 20 states of the Association and representing every type of high school—rural and urban—large and small—industrial and classical—etc. The data from these letters have been aggregated by Mr. A. W. Youngblood who expects to submit them in ultimate form as a master's thesis at the University of Chicago. Certain of the tabulations are in the material which has been furnished you. We will discuss briefly only a few points.

It is indeed interesting to note that 547 of the schools regularly notify institutional bureaus first and only 248 notify private agencies first, or a ratio of 2 to 1. However, the record for new teachers for 1925-1926 indicate that the ratio of the two sources of supply was only 4 to 3 or in other words that the private agencies had filled a considerable more than their expected share of the vacancies. It is also interesting to note that fully half of the schools do not wait for an answer after notifying one source of supply before notifying other sources of supply.

Evidently one of the most serious difficulties which school men have to meet is that which arises from the uncertainty of validity in testimonials. Objections to testimonials from private agencies were raised by 229 and to testimonials from institutional bureaus directly by 122 and indirectly by more than 50 others. Fifty-seven superintendents or principals report that institutional bureaus are too anxious to place their own graduates. This complaint evidently is closely related to questionable testimonials. Is the difficulty, here, one which the bureau or agency can control? Probably not en-

tirely but at least neither bureaus nor agencies need be as solicitous about favorable recommendations as is one large institutional bureau which insists that all graduates of the institution are excellent and therefore refuses to accept for use any recommendation which is not laudatory rather than refuses to list graduates who do not receive laudatory recommendations. It seems that, ultimately, a bureau or an agency must succeed largely in accordance with the reputation which it establishes for validity in its recommendations and testimonials.

The availability of candidates by one or the other source often means much to the employer. One hundred forty-nine school men commented favorably on private agencies on the score while only 30 commented favorably directly on the point for institutional bureaus. Fifty commented that institutional bureaus had only a small list of candidates. The wide range of candidates of private agencies received favorable comment from 48. Twenty stated specifically that they received service from private agencies for "experienced" teachers. On the other hand twenty-six complained that the institutional bureaus did not keep track of their graduates and 66 complained that institutional bureaus furnished only inexperienced teachers. Evidently, as was indicated in the discussion of materials submitted by the institutional bureaus, failure on the part of institutions to "follow up" their graduates and thus to have an available list of experienced teachers drives employers to seek other sources of supply. In letters submitted by bureau secretaries, complaints that school men insisted on experienced candidates, were frequent. Until public bureaus realize the possibilities of a list of available experienced candidates, private agencies

will continue to fill many of the best paying places. It is true that inexperienced teachers must get experience somewhere but on the other hand it must be recognized that many teaching and administrative positions must be filled with persons who have had experience.

One hundred forty-two superintendents and principals report that they favor private agencies because of their promptness in handling requests, and seventy-six others declare that they use agency service on "emergency cases". In other words where the matter of prompt service is an issue, 218 men apply to the private agency. Twenty-nine declare that institutional bureaus are prompt. Only three individuals objected to lack of promptness on the part of the private agency but 68 men distributed through seventeen states did object to lack of promptness on the part of institutional bureaus. Prompt service is often a vital factor in placement work.

Adverse comments on too many applicants for a position were made by 95 men in the case of private agencies and a similar complaint by 57 men is implied against institutional bureaus when they declare that bureaus are too anxious to place their own graduates. These comments in connection with various others indicate that superintendents and principals are often indefinite in their statements concerning vacancies.

The data from which these statements are secured should be representative since approximately one-half of all public secondary institutions belonging to the Association responded. As was reported earlier, these schools represented all types and sizes of high schools. Only in a few cases, was there any indication of anything but the frankest kind of attitude in the reports, and in those few cases, the

report was apparently biased in favor of institutional bureaus. A few individuals were truly emphatic in their insistence that the private agency was an unnecessary evil. On the other hand, other individuals had apparently had unfortunate relations with public bureaus. By and large, the committee believes that the date presented well represents the attitude of the administrators of North Central Association high schools on the proposition of where they may receive service in securing new teachers and on the type of service they are likely to receive from each of the several sources.

The committee submits herewith a few recommendations which it believes may help solve some of the difficulties which seem to exist at present.

1. That the type of blank sent out by bureaus public and private be studied and some form established which will enable superintendents and principals as employers on the one hand and bureaus public and private on other hand to understand each other. "Flooding with applications", recommending candidates with insufficient preparation or with characteristics which preclude their candidacy, delays on account of additional inquiry before recommending candidates, and divers other types of misunderstandings between potential employers and bureaus could be avoided if some common form of expression could be found, i. e. as one man expressed it "If superintendents and agencies could speak a common language."

2. That every effort be put forth by members of the Association "to scotch the snake" of false or ambiguous testimonials. Can there not grow up among executives of the Association an insistence on the part of each man that he will not write testimonials for persons whom

he will not tolerate in his own system and an urge that other men do not send testimonials to him unless they give the bad as well as the good, the unsatisfactory as well as the satisfactory about any candidate? And further that institutional bureaus take over the responsibility of securing recommendations for those who enroll with them rather than leave to the candidate the matter of choosing those faculty members who shall recommend. And furthermore that there should be on file at the bureau office statements of the success of the work in every department in which the candidate has had college work.

3. That institutional placement bureaus, if they are to perform the important function of filling positions for which experienced candidates are needed, must take over the work of "follow-up" on their alumni who are successful in the field. At present it is quite evident that there is a real field for private agencies in the promotion of successful men and women in the field and will continue to be so until the institutional bureau takes over the responsibility of keeping available such of its alumni as are worthy of promotion. Certain states and state teachers' associations have endeavored to take over some of this responsibility and in some cases with considerable success but as yet there is little to lead one to believe that such organizations will be free from the political favoritism which often attaches itself to similar types of organizations.

4. That placement bureaus have available and usable records of,

- (a) High school work.

- (b) College subjects and success in the same.

- (c) Majors and minors.

(d) Weaknesses as well as points of strength.

(e) Detailed information on professional training.

5. That bureaus endeavor to secure sufficient force so that service can be "speeded up." The bureau cannot afford to constitute itself the judge as to whether or not the opening is one which needs immediate attention. Emergency cases may demand no less rapid response than other calls. Sometimes the employer's time may be limited although it is four months until the teacher is to begin her work. Furthermore, if institutional bureaus are to compete successfully with private agencies in placing persons in the better places, there needs must be some technique developed for caring for the matter of continued and possibly continuous "follow-up" of the case. Employers need to be "convinced" at times as to the fitness of candidates.

6. That the person in charge of a bureau should be someone with a knowledge of the field of public education and with the ability to *meet men* executives. Private agencies have long since learned this lesson but some of our institutions still fail to see the value of personality and business ability in this appointee. This leads into the entire field of making "contacts".

7. That the college and university early in the student's career should perform the duty of attempting to dissuade unfit persons from attempting to prepare for teaching. In certain states, it is a foregone conclusion that the number of Jewish or Catholic candidates which can be placed will be largely determined by the number of new teachers to be employed in certain cities. University authorities cannot forbid any group taking education or any other work but they

should make known the probability or improbability of later employment.

8. That since there is ample field for intensive research into how best to bring together the potential employer (the superintendent) and the would-be worker (the teacher) such research might well be undertaken in the near future because cooperation of agencies both private and public has been assured throughout this superficial investigation.

Committee.

PART II

Data from Blanks, etc., of Placement Bureaus PERSONAL AND MISCELLANEOUS

	State Insti- tution	Private and Denomi- national
1. Date of registration with Bureau -----	17	18
2. Name (in full) -----	22	32
3. Temporary address ---	21	26
4. Temporary telephone -	19	17
5. Permanent address ---	19	26
6. Permanent telephone -	5	9
7. Place of birth -----	8	10
8. Age or date of birth --	21	32
9. Height -----	19	31
10. Weight -----	19	31
11. Nationality -----	2	7
12. Nationality of parents_	2	2
13. Occupation of parents_	1	0
14. Condition of Health --	13	20
15. Physical disability ----	7	5
16. Married -----	17	15
17. Children in family ---	8	7
18. Widow -----	1	0
19. Widower -----	1	0
20. Divorced -----	1	0
21. Color of Hair -----	0	2
22. Color of Eyes -----	0	2
23. Dancing -----	1	1

	State Insti- tution	Private and Denomi- national		State Insti- tution	Private and Denomi- national	
24. Rating on Intelligence			50. What type of position			
Test -----	0	1	do you want -----	14	17	
25. Do you use tobacco --	2	3	51. What subject do you			
26. Color -----	1	0	desire to teach -----	9	16	
27. Are you an American			52. Special subjects -----	?	?	
Citizen -----	1	0	53. What subjects can you			
28. Favorite out-door sport	1	0	teach -----	7	17	
29. Of what lodges a			54. What subject you			
member -----	0	1	<i>cannot</i> teach -----	1	0	
30. Of what scientific,			55. How long do you ex-			
literary or honorary			pect to teach -----	0	3	
societies -----	1	1	TRAINING			
31. Church membership --	17	29	1. High School -----	21	24	
32. Church Preference ---	17	18	2. Subjects taken in High			
33. Sex -----	0	1	School -----	3	7	
34. Type of certificate to			3. When graduated -----	18	11	
teach -----	19	24	4. When and where High			
35. College distinctions ---	10	8	School -----	12	16	
36. Have you studied			5. Major work in High			
abroad -----	5	0	School -----	3	3	
37. What foreign language			6. Colleges attended ----	19	22	
—read readily -----	7	10	7. When -----	19	17	
38. What foreign language			8. Where -----	15	14	
—speak readily ----	9	10	9. Degrees and dates			
39. List of books or maga-			(a) Received -----	18	13	
zine articles written--	3	0	(b) Expected -----	14	11	
40. What musical instru-			10. Majors in college ----	12	16	
ments' do you play --	11	10	11. Minors in college ----	10	15	
41. Do you sing -----	9	7	12. Subjects taken (Grad.)	13	3	
42. Can you lead chorus			13. Subjects taken (Under			
or other vocal -----	12	15	Grad.) -----	15	14	
43. Can you lead band or			14. Success in each subject	2	2	
orchestra -----	9	6	15. Success in general edu-			
44. Can you coach athletics	13	17	cation -----	2	4	
45. Can you coach debate--	5	16	16. Professional studies			
46. Can you coach			(a) General titles			
dramatics -----	6	16	etc. -----	4	5	
47. In what extra-curricu-			(b) Specific titles --	10	7	
lar interested -----	9	14	17. Elementary school at-			
48. Choice of locality ----	10	15	tended -----	5	1	
49. What salary is expected	14	22	18. Practice teaching			
			(General) -----	2	2	

	State Insti- tution	Private and Denomi- national		State Insti- tution	Private and Denomi- national
(a) Where -----	1	1	26. Sincerity, etc -----	3	2
(b) Number of weeks -----	3	1	27. Self-confidence -----	1	0
(c) Subjects -----	4	2	28. Tolerance -----	1	0
19. Length of period of study or date of ma- triculation -----	6	5	29. Poise -----	2	2
20. Total hours of graduate credit -----	1	0	30. Discipline -----	2	7
21. Title of Master's or Doctor's Thesis -----	1	0	31. Intellectual fitness -----	1	1
22. Attendance on Summer Sessions -----	3	2	32. Voice -----	3	2
			33. Professional attitude -	4	5
			34. Perseverance -----	1	3
			35. Punctuality -----	1	6
			36. Neatness in work -----	0	1
			37. Loyalty -----	0	5
			38. Personal habits -----	0	1

REFERENCES

1. Scholarship -----	13	18
2. Experience -----	7	?
3. Character -----	6	15
4. Personality -----	4	8
5. Adaptability -----	4	2
6. Judgment, etc. -----	6	9
7. Leadership -----	5	5
8. Personal appearance --	9	15
9. Health and vitality ---	6	13
10. Social qualities -----	4	6
11. Attitude toward work -	3	3
12. Probable teaching suc- cess -----	13	12
13. Probable growth -----	3	0
14. Tact -----	4	4
15. Use of English -----	4	6
16. Industry -----	2	7
17. Originality and initia- tive -----	4	8
18. Cooperation, etc. -----	4	14
19. Maturity -----	1	0
20. "Ability" (Mental, etc.) -----	4	9
21. Enthusiasm -----	4	2
22. Dependability -----	3	6
23. Spirit of service -----	1	1
24. Courtesy -----	1	1
25. Refinement -----	1	0

FROM WHOM

1. Several professors ---	2	0
2. From all departments -	1	0
3. From all professors in special departments -	1	0
4. Student chooses pro- fessors -----	8+	15+
5. From supts. where ex- perience -----	5+	4+
6. General references ---	6+	8+
7. "Competent judges" --	0	1

EXPERIENCE

1. When -----	18	18
2. Where -----	17	17
3. Salary -----	14	11
4. Type of position -----	15	15
5. Subjects taught -----	12	9
6. Total teaching exper- ience -----	12	5
7. Positions other than teaching -----	3	5
8. Chief subject taught --	0	1
9. Not specific -----	0	9
10. Membership in teach- er's agency -----	0	2
11. Largest class ever taught -----	1	0
12. Smallest class ever taught -----	1	0

Data from 853 Reports by Superintendents or Principals

INSTITUTIONAL BUREAUS

I. FAVORABLE COMMENTS:

1. They are reliable. 285.
2. Helpful recommendations are furnished. 93.
3. They have a superior list of teachers. 20.
4. They know their candidates. 45.
5. Try to fit applicant to the position. 39.
6. Personal interest and responsibility. 16.
7. Teachers for special subjects. 7.
8. They give a list of available candidates. 30.
9. They are more discriminating. 30.
10. For inexperienced teachers. 33.
11. Secure young people with progressive methods. 3.
12. Splendid in follow-up work. 4. (Only from two states.)
13. Prompt. 29.
14. When personally acquainted with the director. 1.
15. Frank and honest. 34.
16. They give us excellent teachers. 4.
17. Data are complete and accurate. 12.
18. Arrange for interviews. 5.

II. UNFAVORABLE COMMENTS:

1. Small list of candidates. 50. (Thirteen states).
2. Too little on personal characteristics. 5.
3. Very slow. 68. (Seventeen states).
4. Lack of organization. 20.
5. Statements too general—inadequate knowledge. 36. (11 states).

6. Too much stress on scholarship. 26.
7. Do not study positions—often send misfits. 15.
8. Difficult for personal interview. 1.
9. Do not follow up former graduates. 26.
10. Unreliable recommendations. 122.
11. Too many inexperienced teachers. 66.
12. Set salaries of beginning teachers too high. 2.
13. Statements of native ability neglected. 1.
14. Not well acquainted with the candidates. 23.
15. Recommendations not based on teaching experience. 10.
16. Too anxious to place their own graduates. 57.
17. Retain best candidates for larger cities or friends. 3.
18. Too many applicants for the same position. 3.

PRIVATE TEACHERS' AGENCIES

I. FAVORABLE COMMENTS:

1. They give a wide range of candidates. 48.
2. They have an available list of candidates. 149.
3. Used as a last resort. 14.
4. Used in emergency cases. 76.
5. For promptness. 142.
6. For special teachers. 12.
7. Satisfactory. 163.
8. They try to find us the required teachers. 33.
9. Depends upon reliability of the head of the organization. 3.
10. Complete and well organized data. 34.
11. Best for experienced teachers. 20.

12. When universities are closed. 1.
13. Depends upon the agency. 3.
14. 50% of the time. 17.
15. Teachers do not break contracts.

1.

II. UNFAVORABLE COMMENTS:

1. Too many applicants for the same position. 95.

2. Place commission before service. 75.

3. Difficult to interview applicants in other states. 7.

4. Commission is too high for the teacher. 17.

5. The best teachers do not enroll. 33.

6. Numerous recommendations are unreliable. 229.

7. Teachers are notified of vacancies which do not exist. 4.

8. They do not know candidates well enough. 19.

9. Data are neither complete nor organized. 16.

10. They cause unrest among teachers. 10.

11. There is not enough discrimination. 58.

12. Too anxious to place candidates of their "own." 2.

13. Poor qualities of the applicant are not listed. 32.

14. Teachers are of the transient type. 5.

15. Misfits in certain communities. 9.

16. Misfits in subjects to be taught. 31.

17. They are not prompt. 3.

23. 50% of the time. 3.

24. Have never used them. 47.

25. No favorable comment. 16.

State	Private Agencies Favor- able	Unfavor- able	Institutional Bureaus Reaction By States	
			Favor- able	Unfavor- able
Arizona	19	20	15	20
Arkansas	10	14	12	5
Colorado	51	38	45	51
Illinois	143	111	98	87
Indiana	52	42	32	31
Iowa	54	52	56	46
Kansas	42	51	56	37
Michigan	71	48	74	37
Minnesota	40—	33	27	32
Missouri	14	8	19	10
Montana	19	18	16	18
Nebraska	34	40	42	30
New Mexico..	13	12	9	7
N. Dakota ...	28	26	22	24
Ohio	52	57	62	32
Oklahoma	12	20	29	19
S. Dakota	26	26	32	18
W. Virginia..	8	9	9	5
Wisconsin	29	26	34	17
Wyoming	8	6	5	6
Total	725	657	690	534

The source first notified in case of a vacancy:

Educational Institutions, 547.

Private Agencies, 248.

Use applications on file, 46.

State Placement bureau, 48. (27 in Minnesota).

Active search, 3.

State Teachers' Association, 30 (24 in Kansas).

Other school men, 5.

Depends, 3.

Does the school wait until it hears before notifying other sources?

Yes—241.

Usually—114.

No—244.

Not always—81.

Depends—10.

By means of weighting the results in accordance with the reverse order of frequency, it was found that new teach-

ers for the 853 North Central Association schools in 1925-1926 were secured from the various sources in the following rank and ratio:

1. Bureaus of Educational Institutions, 1.9.

2. Active search, 2.23.

3. Applications on file, 2.53.

4. Private Teachers' Agencies, 2.61.

5. State Placement Bureaus, 3.82.

(Largely in Minnesota).

6. State Teachers' Associations, 4.19.

The Next Meeting

*The next meeting of the Association
will be held in the Stevens Hotel, Chi-
cago, March 14th and 15th, 1929.*

The Association of Representatives of Regional Standardizing Agencies

About a year ago the executive committee of the North Central Association of Colleges and Secondary Schools authorized its secretary to call an informal meeting of the officers of the regional standardizing associations. After some correspondence with officers it was found that this meeting could be called to advantage at the time of the annual meeting of the Department of Superintendence in Boston, February 25 to March 1, 1928. At this meeting there were representatives of the following standardizing agencies:

Association of Colleges and Secondary Schools of the Middle States and Maryland.

Association of Colleges and Secondary Schools of the Southern States.

New England Association of Colleges and Secondary Schools.

North Central Association of Colleges and Secondary Schools.

Northwest Association of Secondary and Higher Schools.

Following are the official minutes of the meeting as formulated by the temporary secretary, Joseph Roemer:

On February 28, 1928, there convened in the Statler Hotel, Boston, Massachusetts, a group of officials representing the various regional standardizing agencies of secondary and higher education. This voluntary meeting was called by Dr. J. B. Edmonson of the University of Michigan, Secretary of the North Central Association, at the direction of the Executive Committee of that Association. It was the thought of the Execu-

utive Committee of the North Central Association that a meeting of the various officials of the regional standardizing agencies could prove very helpful to all parties concerned. The following persons were present at this meeting:

R. N. Dempster, John Hopkins University, representing the American Association of Collegiate Registrars.

Ira M. Smith, University of Michigan, also representing the American Association of Collegiate Registrars.

A. F. Warren, New York City, representing the Middle States and Maryland.

E. D. Grizzell, University of Pennsylvania, Chairman of the Commission on Secondary Schools, Middle States and Maryland.

Superintendent H. M. Ivy, Meridian, Mississippi, President of the Association of Colleges and Secondary Schools of the Southern States.

Superintendent T. W. Gosling, Madison, Wisconsin, Past Vice-President, North Central Association.

C. A. Howard, State Superintendent, Salem, Oregon, representing Northwest Association of Colleges and Secondary Schools.

Principal William C. Hill, Springfield, Massachusetts, representing New England Association.

Principal William E. Wing, Portland, Maine, representing New England College Association.

L. T. Jackson, State Department of Education, Trenton, New Jersey.

W. E. Stearns, Barringer High School, Newark, New Jersey.

Dean C. R. Maxwell, University of Wyoming, representing North Central Association.

President Guy E. Snavelly, Birmingham-Southern College, Secretary of the Association of Colleges and Secondary Schools of the Southern States.

Dean Randall, Brown University, representing New England Association.

Dr. W. B. Jacobs, Brown University, Secretary of the New England Association.

Dr. Jesse H. Newlon, Lincoln School, Columbia University.

M. C. Wagner, Wilmington, Delaware, High School, Commission on Higher Education, Middle States and Maryland.

C. O. Davis, Editor North Central Association Quarterly, University of Michigan.

J. B. Edmonson, University of Michigan, Secretary of the North Central Association.

Joseph Roemer, University of Florida, Secretary of the Commission on Secondary Schools of the Association of Colleges and Secondary Schools of the Southern States.

The meeting was called to order at 2:30 P. M. by Dr. Edmonson of the University of Michigan. Dr. Roemer, of the University of Florida, was asked to serve as temporary secretary. The following program was rendered:

1. Some Similarities and Some Differences in the Standards Defined by Regional Standardizing Associations for Secondary Schools. Professor E. D. Grizzell, University of Pennsylvania.

2. What Kinds of Co-operation Between Regional Standardizing Agencies

are Desirable and Feasible? Professor Joseph Roemer, University of Florida.

3. The Possibility of Co-operation Between the Secondary Schools of the Regional Standardizing Associations in a Nation Wide Survey in 1930. Mr. Carl A. Jessen, U. S. Bureau of Education.

4. How Can the Standardizing Agencies Be of Most Service to Education in the Future? Dr. Jesse H. Newlon, Principal of Lincoln School, Columbia University.

5. Is a National List of Approved Colleges and Accredited Secondary Schools Feasible Through Co-operation of the Various Standardizing Agencies. Dr. D. A. Robertson, The American Council on Education.

After considerable discussion on the advisability of continuing the meeting the following resolution was passed: Resolved That:

- (1) A permanent organization be formed composed of the officials of all the regional standardizing agencies of secondary and higher education.

- (2) That a temporary chairman and secretary be elected to serve until a permanent organization is affected.

- (3) That the temporary officials be instructed to prepare a program and call a meeting of this organization to convene one year hence at the superintendents' meeting of the National Education Association.

- (4) That the chairman be authorized to use any of the members of the group in preparing the program and in drafting such regulations as are needed in forming a permanent organization.

It was the opinion of all present that there was a real need for a permanent organization of this kind to act as a co-

ordinating agency of all the various standardizing agencies in the field.

Dr. J. B. Edmonson, University of Michigan, was elected temporary chair-

man and Dr. Joseph Roemer, University of Florida, temporary secretary.

The meeting adjourned to meet one year hence.

[J. R.]

The Present Situation in the Secondary Commission

BY CHAIRMAN F. C. LANDSITTEL, OHIO STATE UNIVERSITY,
COLUMBUS, OHIO

Acting upon a kind suggestion of the Editor, the Chairman of the Commission on Secondary Schools is very glad to offer to readers of the Quarterly a brief statement of his aspirations concerning the work of the new Association year. One of these, and one only, is purely personal. It is to justify, in such measure as may be possible, the honor and confidence reposed in me by the Commission, and to bear always a due sense of pride in having found preferment amongst a body of men to whose sterling worth and devotion to the great cause of education I would under any circumstances pay generous tribute.

There was occasion for special satisfaction in the recent meeting of the North Central Association at Chicago, in the unmistakable evidences that were observable of renewed vitality in the organization. The attendance surpassed all previous records; the program was a superior one; and the meeting was characterized by even more than the ordinary amount of buoyant energy in work and consequent efficient despatch of business. The general situation was one auguring favorably for the future. It was a manifestation throughout of life and vigor; and it furnished demonstration in more than one instance of the organization's capacity to abide by the most fundamental law relating to the life of institutions. I refer to the law of responsiveness to changing conditions. Although occupied with standardizing ac-

tivities primarily, it does not suffer the standards in which it deals to become so fixed as to stay its own progress or to impede the progress of the schools and colleges whose interests form the total reason for its existence.

Certain facts may be mentioned that speak eloquently on the point just referred to. The junior high school, in the first place, enjoys relatively free rein in its process of maturing, so far as policies of the Association affect it, although it cuts rather deeply into the conventional four-year high school; and in virtue of action taking place a year ago, its liberty of action may reasonably be expected to become greater in the future rather than less. The junior college likewise finds encouragement in spite of the really serious degree to which it threatens the American four-year college. Significant also of the Association's progressive spirit is the unhesitating authorization at the March convention of certain curricular experimentation at Joliet, even though it might involve contravention of established prescriptions. Of similar import also is the program of visitation that is in prospect in the Commission on Higher Institutions, having for its object the use in a primary way for accrediting purposes of directly observed facts relating to the spirit and effectiveness of institutions, as against the relatively mechanical measures that have become customary.

There is obvious suggestion to the Commission on Secondary schools in this

last named new policy. It should draw our minds to the importance of the trust that is reposed in our several state committees. These committees, reliably constituted as they are, may be viewed, in the light of the new policy which the Higher Commission sees fit to inaugurate, as putting the Secondary Commission in a position of advantage that perhaps has hitherto been not properly appreciated. In the absence of the special service rendered by these committees, our annual passing upon upwards of two thousand schools would in reality approach mockery. Thorough, sympathetically critical inspection of schools can not be dispensed with; nor can the findings reached by state committees, possessed as they are of first-hand information, be ruthlessly set aside by reviewing committees. The state committees are in a strategic position, of which advantage should be taken through their scrutinizing reports with the special thoroughness that local familiarity makes possible and in applying to representations made in them such special checks as circumstances may warrant.

It may not be amiss in this connection to suggest renewal in a special way on the part of state committees of their zeal with regard to Standards 5 and 6 relating respectively to the tone and general efficiency of schools and to the salaries paid. The former penetrates to the vitals of a situation as does no other standard in the entire category. Its application accordingly becomes a severe test of both the intelligence and the courage of the examiners of schools. A reliable judgment concerning the matters to which it refers can be reached in many instances only after an incisive and comprehensive study of the situation and if the conclusion reached must

needs be adverse, there is likelihood of its being felt in an especially keen way by those affected by it. The importance of Standard 6 is found in the fact that it not infrequently points to the cause of which conditions referred to in the preceding standard are the effect. While virtue ordinarily is not measured in monetary terms, professional excellence as a rule is. Administration of both of these standards is of necessity left to the state committees; and it is to be hoped that there may be nowhere a disposition to treat the responsibility at all lightly.

If the recommendations of state committees are to be relied upon even no further than has been customary in the past, it would seem feasible to simplify somewhat the reports that are required of schools. This assuredly should not be carried to the point where loss of really useful educational statistics would be incurred. Inside of this limit, however, there are possible economies that may well be considered. A specific immediate step that I would urge in the direction suggested is the establishment at the headquarters of state committees of cumulative records covering teachers' qualifications. A card form suitable for filing, and similar as regards the data provided for to Form D as used last year, could be sent out and returned, which would set at rest the matter of reporting on teachers excepting as necessary new credits are earned and new teachers enter the service. Record systems of the type suggested exist already in the offices of at least some state departments of education; why could not these be used in such states as have them; or more especially why should duplicates of them, in part at least, be assembled each year at great outlay of both time and effort? There are consid-

erable economies possible, I believe, particularly in connection with that phase of our reporting practices relating to teachers' qualifications, to which the Commission may very well give early attention.

A further need relates more directly to training requirements. We have now attained to a situation in which regard for quantity of training should give way somewhat to greater insistence upon quality. Along with the bachelor's degree requirement, which has been fairly consistently enforced for a long period, there has stood also for a considerable time a minimum number of hours of professional training, recently advanced to fifteen, as representing the minimum acceptable preparation. This is the result of a gradual raising of the standard as regards amount of training in response to a changing conception regarding what constitutes competency in the teaching situation. The standards obtaining in accredited colleges have up to the present been considered satisfactory guarantee of the *quality* of training in both its academic and professional phases. Contrary to this presumption there is some basis for honest doubt on both sides.

The academic side suffers in some instances from freedom allowed in certain quarters, if not a requirement, to the end that a proportion of undergraduate work is given to professional courses large enough to militate seriously against a sufficiency of academic training. There is strong reason to suspect, too, that an extent of duplication obtains in these extensive professional hours that would require their being scaled down by a considerable per cent if justice on all hands were done. An obvious and unfortunate effect of this procedure, if it were applied, would be in many cases to

throw the total of recognizable collegiate training below the minimum of 120 hours. In other situations, the worth of professional courses being still doubted such a number are offered as when combined with others that are only semi-professional, if in reality at all so, in character will amount to the bare minimum necessary in the professional field. The administration of teachers' courses in these situations moreover is seldom such as to inspire any real mastery on the part of students of even the minimum essentials of such as are pursued. The entire curriculum in either case is not one that can with consistency be improved.

A kindred problem to that of maintaining teaching staffs that are capable in point of training is that of preserving their capability in point also of number. A weakness in either of these two aspects is vital. The Commission has been subjected to some harassing in recent years on the second of these points, which was but inevitable in view of the marvelous way in which school enrollments have been mounting. Influenced to an extent by demands coming from superintendents and by certain studies, seeming at least to show that large classes have a less deleterious effect upon the quality of school work than they have been adjudged to have, the standard relating to pupil-teacher ratio and teacher load has suffered very material relaxation in form. To this joint action, however, of economic considerations and the investigations just referred to, the famous sentiment of Lord Byron would seem to apply it is capital argument but who believes in it? So far as financing an adequate teaching staff is concerned, means should without a doubt be found. In other words higher costs are justified

when commensurately superior advantages to youth the realized. The case, then, plainly hangs upon whether large classes are really as good as smaller ones. Not a few of us find ourselves still unconvinced that they are.

The fact just stated obviously is not in itself to be regarded as presenting an intolerable state of affairs; but since the standard in its present liberal form continues to be grossly violated by a considerable number of schools, it seems imperative that more serious study should be applied to the problem than it has hitherto received. A preliminary step to anything in the way of experimentation that might be attempted could well take the form of a critical review of such investigations as have already been reported, considering especially the justification of the conclusions that are advanced. I should view it as distinctly a piece of good fortune if we could have on our next program a searching paper, or better still a comprehensive symposium dealing fully with the issues that are at stake. In connection with any such undertaking as this, it would be of manifest importance to consider the claim advanced by the offending schools, which naturally are the very large ones for the most part, that the superior training and experience of their teachers should be accepted as an off-set against an apparently excessive teacher load. This claim appears to be entitled to some respect. Its merits should be looked into, to the end that if found to be justified a basis of adjustment eventually may be agreed upon that will work with more than present fairness to all institutions and individuals concerned.

In all of these suggestions that I am making bold to offer the uppermost thought is in strict keeping with the

major purpose of our Association. It is none other than that sound educational results in the interest of the youth of the day shall be achieved. We are settling out to make a second attempt to measure these results in terms of the success in college of the recent graduates from North Central schools. It is greatly to be regretted that for presumably altogether sufficient reasons the results of a former similar investigation failed to gain sufficiently wide publication. With the reasons for this failure I am not at all conversant, nor am I concerned about them. I feel, however, that I may entirely without presumption voice the unwillingness of the Commission to look forward to a similar result at the end of the two years' special study of the same problem that is now on foot. In order that the labor and expense involved in making this study may redound to the general good, active support is solicited in behalf of the committee having it in charge; and particularly is it urged that the thought of the membership be given to each of two specific problems with reference to which material facts may be expected to be found. The one is the perennial question of how well the schools are succeeding in the development of the attitudes and powers that are distinctive of scholarship; and the other, addressing itself more especially to Association councils, has to do with the possibility of deriving from the results of such studies a new criterion that may practicably be combined with others that we use in determining the excellence of schools. To enter upon a discussion of either of these points at this time would be not only inopportune but presumptuous as well. They may, however, be in the minds of us all against the day when the completed study is in our hands.

In closing this word of suggestion, I wish, to acknowledge my debt of gratitude for the editorial invitation that called it forth. Not certainly that anything like pretentiousness has found gratification, but rather that the work lying ahead has come to be much more truly appreciated and, I believe, more clearly envisaged in virtue of the effort to write about it. What has been said will be regarded, I hope, as an effort to take into full confidence the membership of the Commission, and other readers also

who may be interested in its welfare. The support will be forthcoming, I am sure, without the asking. May we not do ourselves the credit of pledging together renewed fealty to the important work that we have in hand, and to keep that pledge in the steadfastly loyal spirit that has made the North Central Association a real power in a good land.

F. C. LANDSITTEL,
Chairman of the Commission on
Secondary Schools.

How Can Standardizing Agencies Best Serve the Cause of Education in the Future?*

BY JESSE H. NEWLON, DIRECTOR, LINCOLN'S SCHOOL
NEW YORK CITY

The words "standard" and "standardize" when used in education have come to have a connotation that is very unpleasant to many ears. And yet the very people who condemn what they call the "standardization" of education find it impossible in their educational discussions to avoid the use of terms such as "standards" or "achievements" that will describe qualitatively and quantitatively the attainments of pupils. We are all afraid of the standardized school. We want the school to have personality. We want it to cultivate the creative impulses of children. We do not want it to be as like all other schools as one Ford is like another Ford. And yet we want our school to be a good school—one in which the pupils attain to high levels of achievement in the worthy things which they undertake to do. We do not like the bad connotation which the word "standard" has acquired, and yet we want our school to maintain a high standard, measured, of course, in terms of what we conceive to be the most important values.

The associations and other agencies that have been formed in the last generation for the purpose of establishing standards for high schools and colleges have been the objects of considerable criticism in recent years. An increasing number of students of secondary and higher edu-

cation have come more and more to feel that these agencies are at present having a deadening effect on the schools which they standardize.

Doubtless the explanation of these criticisms is found in part in the general attitude of suspicion toward the word "standardize." On the other hand it must be noted that the criticisms come largely from those who administer secondary schools and who believe that the measures now used by the accrediting agencies have to do with externals and not with education, or that these measures are based on an outworn philosophy and hinder education. Advocates of modernized high schools are undoubtedly the severest critics of the work of the standardizing agencies.

These criticisms have been smoldering for more than a decade. I recall, for example, that in April, 1916, as an Illinois high school principal, I attended a meeting at the La Salle Hotel in Chicago that had been called by certain high school principals to protest against some of the actions of the North Central Association. Some took the position on that occasion that it would be unwise to attempt to form an insurgent organization composed only of high school principals. We pointed out that the solution of the problems of articulation between the high school and the college must be worked out cooperatively, and that whatever the faults of the North Central Association might be, such an organization was in-

*Read before a conference of officers of school and college accrediting agencies, Boston, Feb. 28, 1928.

ispensable to the solving of these common problems. We succeeded in convincing the leaders of this movement that they should join forces with those who had decided a month previously, at the meeting of the Department of Superintendence in Detroit, to launch an Association of Secondary School Principals. The two movements were fused, and the National Association of Secondary School Principals held its first meeting a year later at the convention of the Department of Superintendence in Kansas City in 1917.

Are the criticisms of the standardizing agencies well founded? No doubt these criticisms are a part of the general criticisms of prevailing methods of administering college entrance. The standardizing agency that has to do with the setting up of standards must inevitably come in for a certain amount of criticism, whether just or unjust. But first let us examine the record of these associations.

If such associations as the North Central Association, or the agencies that through published investigations have contributed to the standardization of secondary schools, colleges, and professional schools, are to be judged by the total effect of their work, even the most critically inclined must be forced to admit that the ledger shows a large balance to their credit.

Let us examine the work of the North Central Association from the standpoint of the quality of education that is offered in city, town, village, and hamlet, and frequently in consolidated schools, throughout the great territory that it covers. It would be impossible to estimate the impetus which this association has given through the administration of standards to the upbuilding of good high schools. Today in the Middle West in

every community, large or small, a good high school is a matter of community pride, and every community knows very well the accepted external characteristics of a good high school. It knows that an accredited or approved high school is housed in a good building, is equipped with good laboratories and shops and a library, offers an acceptable curriculum extending four years above the traditional eight-year elementary school, and is staffed by men and women who are graduates of approved or accredited colleges. Today such a high school is accepted everywhere as a part of our common school system.

The high school has also become a community center. It is equipped with an auditorium to which the people come to hold all kinds of community meetings. The high school is one of the most important factors in the community life of America. No other nation offers secondary education to so many of its youth.

The high school movement would have come, of course, had there been no standardizing agencies. It would have come in spite of standardizing agencies had these agencies attempted to repress or restrict severely its development. But these agencies were not a restraining influence. On the other hand, by setting up standards of admission to college, by holding up the highest ideals of educational achievement to local communities, they have very greatly accelerated the movement; and their influence has been in the direction of better schools housed in better buildings, offering programs of education better adapted to the needs of the individual than characterized secondary schools of an earlier generation.

There is no use to labor this point. During the past twenty-five years these agencies have been a constructive force

in the development of American secondary education. This is not to say that mistakes have not been made or that these agencies have always viewed their opportunities in the broadest possible light. Mistakes have been made. The outlook at times has been very restricted. The associations have, necessarily perhaps, dealt with externals; and yet their service to education has been invaluable. They have done in the early years of their work, in the best possible way, all things considered, the big job that needed to be done for the improvement and expansion of the American high school.

For an illustration of the good work of standardizing agencies in another field, let us turn to medical education, which has been placed on a solid foundation in the last twenty-five years. The incompetent schools have been eliminated. All schools have been immeasurably improved. Medical education faces difficult problems, some of which may be due to too much standardization, but no one conversant with the facts will question the great service to medical education of the standardizing and integrating agencies.

These associations and agencies now face a turning point in their work. They are faced with the problem of outlining a new policy adapted to a changed educational condition.

What are the characteristics of this changed condition? Let me enumerate briefly certain aspects of the present educational situation that bear directly on the functioning of these agencies.

1. By way of repetition, let us keep in mind the fact that the high school is now widely accepted and generally supported as a part of the common school system.

2. The local community is increasingly looking upon the high school as an invaluable community asset, aside from its college preparatory function. The school itself has become a community center. Its curriculum contains many courses of a practical or vocational nature. Large numbers of its students do not enter college. The college preparatory function, therefore, can no longer be considered as the chief function of a high school. Its chief function must be to provide at its level the education needed at that level by its pupils regardless of the entrance requirements of the schools its pupils may later attend.

3. The scientific study of education is gradually changing our concept of the good school. The writings of social and educational philosophers, the discoveries of educational psychologists, and the researches and experimentation that have been carried out along scientific lines in every sector of the field of education are bringing about far-reaching changes in the schools. The present curriculum revision movement, which looks to a school better adapted to the needs of the individual and of society, is a result in large part of the scientific movement in education.

4. There is an increasing interest in education on the part of intelligent laymen and an increasing appreciation and support of the work of the more progressive schools that are breaking with tradition in many important respects.

5. Schools of education and teacher-training institutions have sent into the public schools in the past quarter century hundreds of thousands of professionally trained teachers and many thousands of men and women highly trained in the profession of school administration.

Schools are now administered, except in the most backward communities, by individuals who bring to their work highly developed professional knowledge and skill.

6. These professionally trained executives may be relied upon to maintain the highest quality of instruction in the schools, both elementary and secondary. They are making a scientific approach to the problems of education. They are utilizing the findings of research and are summoning specialists to advise their local staffs in the development of educational programs. Many cities are spending large sums of money in the improvement of the curriculum.

These are the salient facts in the educational situation today as it affects the secondary school and the work of the accrediting or standardizing agencies.

Now let us ask what kind of a school the professionally trained executive will create and administer. Would a good school in the eyes of these men and women embrace a rich and thoroughgoing education in the use of the mother tongue and in English literature? The contrary is unthinkable. The scientific students of education—not the professors of English in universities—have revolutionized the teaching of English in our secondary schools in the last thirty years. The impulse of the student of education is to go far beyond the minimum requirements of college entrance in planning a course in English literature. Would science be neglected? The answer is that scientific students of education and professionally trained administrators are more vigorous advocates of the teaching of the sciences than are the college professors of science. General science arose in the secondary schools in the face of strong opposition from the

conservatives, and when the last obstacle is removed the science courses that will be mapped out for our secondary schools will far exceed the fondest dreams of any individual who ever served as chairman of a committee on college entrance requirements in college or accrediting association. Mathematics will not be neglected. The foreign languages will be taught. It is unnecessary to point out the tremendous attention that is given to the whole problem of health and physical education. Above all, the schoolmen are advocates of thoroughgoing courses in the social studies and the utilization of the entire life of the school in education for citizenship. In short, the professional student of education and the professional administrator are searching for an educational program for the high school that is well rounded, and based on individual and social needs and the soundest pedagogical principles—a curriculum that looks solely to the education of American youth for participation in American life.

What is the curriculum situation now in American schools? It is characterized by two outstanding facts.

First, the elementary school and college do not labor under the handicap of arbitrarily imposed curricular rules and regulations. There is the utmost of freedom in the elementary school to make the curriculum as we will, and to adopt and make use of the best methods of instruction. The result has been great progress in the development of elementary education.

On the other extreme, the college is likewise free to make its curriculum as it will, and today we are witnessing experiments in some of the colleges that are little short of revolutionary. The movement that is characterized by the new procedures in Swarthmore, the Uni-

versity of Wisconsin, Dartmouth, Pomona, and numerous other colleges and universities throughout the land, cannot but result in another decade of colleges very unlike those we have known in the past.

One university is reported to have introduced into its junior college an orientation course which is taught cooperatively by several departments and which is intended to orient the student to the world in which he lives. In this course, as I understand it, the pupil is introduced in an understanding way to the major findings in astronomy, geology, biology, physics, chemistry, psychology, and other fields of science. These orientation courses sometimes include the fields of music, art, philosophy, economics, sociology, political science—in brief, the humanities and arts as well as the sciences. They represent a regrouping of subject matter that cuts across the conventional subjects. Time will not permit reference to many other experiments far reaching in their effect, that are being made in higher education.

There is not the same freedom to experiment in the high school. The high school must certify one unit of science, three units of English, so many units of this, and so many units of that. The college board examinations must be met even if that does interfere seriously with the development of an educational program. It is true that these requirements have been liberalized in recent years, but every practical school administrator knows that under present conditions he does not have the freedom to make a high school curriculum according to the best educational thought, research, and experience that he has to apply these principles in the making of the elementary curriculum. The most intelligent and influential part of the

public that supports the school program still thinks of the high school too much in terms of its college preparatory function and in terms of an outworn philosophy of education.

Recently American high schools have been criticised most severely in a Carnegie Foundation report on the ground that their curricula exhibit no careful planning, no logical sequences, and that our boys and girls are not help up to the standards of achievement that prevail abroad. I feel that many of the strictures of this report are unjustified, and yet who of us is satisfied with the American public high school? And why should professionally trained executives and teachers longer be hampered in their efforts to improve the high school by externally imposed quantitative regulations regarding subjects of study?

Have we not come to the time when school administrations should be approved rather than that every high school should be required to meet a made-in-advance set of requirements as to what subjects of study and what subject matter shall be taught to those who shall or may attend college? And notwithstanding the liberalization of entrance requirements, there is still too much prescription even of content. Let us remember too that the studies prescribed for college entrance are regarded by many as the only studies that really educate, with the result that we have thousands of boys and girls rushing into the study of subjects, for whom these particular subjects can offer little of real educational value. The college preparatory studies set the fashion in high schools. What is needed is a resynthesis of subject matter for the purposes of secondary education.

If school executives were left free to put into effect in the high school present

agreements among the best students of secondary education as to what would constitute a good curriculum without regard to entrance requirements, the result would be a product in boys and girls far better prepared than the present generation to undertake the work of the college and the university, and far better fitted for the duties and opportunities of life.

If such a program were adopted, what, then, would be the function of accrediting agencies? This leads me to the second characteristic of the present educational situation to which I want to call your attention.

Second, we have three systems of education: elementary, secondary, and higher that unfortunately have too little in common as regards purpose, methods, and underlying principles. The pupil is subjected to three educational regimes often very unlike.

There will always be endless problems of articulation. An articulated school system can be built only on a unified curriculum, running from the kindergarten through the college. The making of such a curriculum requires the cooperative effort of teachers, administrators, and students of education at all levels. There must be an increasing differentiation as we proceed from grade to grade above the elementary school.

I shall make no attempt here at a statement of the peculiar function of the elementary school, the secondary school, or the college. Each division has its peculiar function, but if the individual is to be best served the curriculum or curricula of each school must be closely articulated with those of the other schools. There must be unity of purpose running through the entire program. This calls for unity of effort.

My proposal, therefore, is that accred-

iting agencies should cease very largely to be accrediting or standardizing agencies and should become, in reality, articulating agencies. Let them throw overboard at an early date, most of their requirements of units and subjects for admission to college. Let the colleges select their students by the use of intelligence and scholarship aptitude tests and on the statements of heads of schools as to the achievements and character of the individual. These agencies could then devote their energies to a study of the principles that underlie curriculum construction and articulation. Let them foster experimentation. Let their whole emphasis be placed on the development of a closely articulated school system offering a curriculum based solely on individual and social needs.

These associations should maintain approved lists of schools, but approval would be in terms of approval of the school administrations and not in terms of units of subject matter offerings. No one would object to a system of accrediting that would demand four things: a good building, good equipment, excellent teachers, and professional administration.

Upon you, the present leadership, rests largely the responsibility for the decision as to whether these agencies will henceforth obstruct the progress of education in secondary schools by clinging to old methods of accrediting, or whether they will greatly accelerate progress by devoting their resources to cooperation with executives and teachers in the development of curricula and methods of teaching for secondary schools and colleges designed to meet the needs of twentieth century life. Such curricula will be increasingly based on sound research and experimental evidence. Judgments based on mere opinion will no longer suffice.

Standards for Accrediting Colleges

By

FLOYD W. REEVES, DIRECTOR, BUREAU OF SCHOOL SERVICE

AND

DALE RUSSELL, ASSOCIATE PROFESSOR OF EDUCATION

UNIVERSITY OF KENTUCKY

(A report prepared for the Committee on the Cost of Instruction of the North Central Association of Colleges and Secondary Schools).

Editor's Note: That portion of this report which precedes the statement of conclusions on page 227 is the work of Professors Reeves and Russell. The conclusions of the study represent the joint work of the Committee and the above-mentioned writers. The recommendations contained in the closing paragraphs are those of the Committee. The Committee on Cost of Instruction consists of the following members: Donald G. Cowling, Lotus D. Coffman, Floyd W. Reeves.

In January, 1927, the Commission on Institutions of Higher Education of the North Central Association of Colleges and Secondary Schools appointed a committee on the cost of instruction to study the effects of the present financial standards of the Association. Personal visits were made to seventeen colleges and a preliminary report¹ was presented at the meeting of the Association in March, 1927. Following this report the commit-

tee was requested to continue the investigation and include a large number of institutions. The first report of the committee appeared in the December, 1927, issue of the North Central Association Quarterly. A second report² prepared for the committee, based upon a larger number of institutions, appeared in the Quarterly for March, 1928. These two reports included data relating to faculty salaries, expenditure per student and sources of income. In the present report some new techniques are applied to the data presented in the earlier reports and additional data relating to the training of faculty members are analyzed.

All of the institutions represented in this report hold membership with the North Central Association of Colleges and Secondary Schools. The institutions included are as follows:

Antioch	Gustavus Adolphus
Bethany	Hamline
Butler	Hiram
Carleton	Huron
Coe	Illinois College
Concordia	Illinois Woman's
Culver-Stockton	College
De Pauw	Knox
Drake	Macalester
Earlham	Milliken
Eureka	Illinois Wesleyan
Franklin	Monmouth

¹The North Central Association Quarterly, December, 1927. "The Cost of Education in Liberal Arts Colleges."

²The North Central Association Quarterly, March, 1928. "Financial Standards for Accrediting Colleges."

Oberlin	Shurtleff
Ohio Wesleyan	St. Olaf
Phillips	Wabash

The data upon which this report is based were obtained by personal visits to twenty-nine institutions holding membership with the North Central Association of Colleges and Secondary Schools. In the case of a few of these colleges the visits to the institutions were made primarily to obtain data for this report. In no case was less than one-half day spent at an institution. The data from a number of the colleges however, were collected while making inspections and surveys for the North Central Association

of Colleges and Secondary Schools. From one to two days were spent at each institution where such a survey or inspection was made. Furthermore, data for a considerable number of the institutions included in the report were obtained as a part of more extensive surveys involving a stay of from one to three weeks at each institution. The facts with respect to personal visitation are mentioned as a justification for a rating which has been given to these institutions, based upon the personal judgment of one of the writers as to their excellence.

The basic data of this study are presented in Table I, Sections 1, 2 and 3.

Table I. Educational and Financial Data for Twenty-nine Colleges Holding Membership with the North Central Association

Institution Number	SECTION A						
	Annual Carrying Load	Current Educational Expenditure	Income From Students	Income From Endowment	Income from All Other Sources	Income from All Sources Except Students	Average Faculty Salary
1.....	173	\$ 52,131	\$ 25,569	\$ 22,995	\$ 3,567	\$ 26,563	\$ 2,080
2.....	290	129,627	47,776	81,851	0	81,851	2,772
3.....	292	77,723	47,884	29,539	0	29,539	1,910
4.....	300	103,479	54,216	33,000	16,263	49,263	2,410
5.....	300	78,950	31,668	47,282	0	47,282	2,185
6.....	338	197,098	166,732	3,754	26,612	30,366	3,426
7.....	356	123,608	57,672	50,736	15,200	65,936	2,508
8.....	360	95,089	50,315	42,000	2,774	44,774	1,969
9.....	370	69,381	50,121	3,857	15,403	19,260	1,988
10.....	370	82,156	46,022	36,135	0	36,135	2,370
11.....	421	73,102	54,315	18,787	0	18,787	2,096
12.....	427	135,717	51,920	41,687	42,110	83,797	2,628
13.....	437	116,163	47,691	68,472	0	68,472	2,752
14.....	462	101,911	47,069	37,930	16,912	54,842	2,344
15.....	488	147,876	76,811	74,775	1,290	76,065	2,364
16.....	500	152,592	93,607	58,985	0	58,985	2,073
17.....	528	153,411	95,443	54,673	3,295	57,968	2,342
18.....	581	101,477	79,272	9,000	13,205	22,205	2,209
19.....	592	155,367	95,122	52,593	7,652	60,245	2,418
20.....	600	179,414	98,383	81,031	0	81,031	2,930
21.....	648	144,305	125,544	18,761	0	18,761	2,419
22.....	828	309,220	237,440	57,656	14,124	71,780	2,894
23.....	957	217,865	145,905	8,762	63,198	71,960	2,130
24.....	999	219,662	139,170	62,405	18,089	80,492	2,382
25.....	1,328	554,881	275,704	279,177	0	279,177	3,321
26.....	1,345	232,886	218,522	14,364	0	14,364	2,371
27.....	1,567	226,895	181,518	45,377	0	45,377	2,408
28.....	1,760	386,038	217,931	119,382	48,725	168,107	2,862
29.....	1,850	504,202	396,212	107,990	0	107,990	2,452
Median	488	\$135,717	\$ 79,272	\$ 45,377	\$ 15,403	\$ 54,842	\$ 2,408

Table I—Continued

Institution Number	SECTION B								
	Annual Carrying Load	Current Educational Expense Per Student	Weighted Expenditure Per Student	Endowment Income Per Student	Average Fees Charged	Income Per Student From All Sources Except Students	Per Cent of Income From Endowment	Per Cent of Income From Students	Per Cent of Income From All Sources Except Students
1.....	173	\$301	\$201	\$133	\$148	\$153	44	49	51
2.....	290	446	297	282	164	283	63	37	63
3.....	292	265	177	101	164	101	38	62	38
4.....	300	344	229	110	181	164	32	52	48
5.....	300	263	175	158	106	157	60	40	60
6.....	338	583	387	11	493	90	2	85	15
7.....	356	347	289	143	162	185	41	47	53
8.....	360	264	220	117	149	115	44	56	44
9.....	370	187	156	10	135	52	5	72	28
10.....	370	222	185	98	124	98	44	56	44
11.....	421	173	144	45	129	44	26	75	25
12.....	427	317	264	98	122	195	31	38	62
13.....	437	265	221	157	109	157	59	41	59
14.....	462	220	183	82	102	118	37	46	54
15.....	488	303	252	153	147	156	50	49	51
16.....	500	305	254	118	187	118	39	61	39
17.....	528	290	290	104	181	109	36	62	38
18.....	581	174	174	15	136	38	9	78	22
19.....	592	262	262	89	161	101	34	61	39
20.....	600	299	299	135	164	135	45	55	45
21.....	648	222	222	29	194	28	13	87	13
22.....	828	373	373	70	286	87	19	77	23
23.....	957	227	227	9	152	76	4	67	33
24.....	999	219	219	12	139	81	28	63	37
25.....	1,328	417	417	210	208	209	50	50	50
26.....	1,345	173	173	11	162	11	6	94	6
27.....	1,567	144	144	29	116	28	20	81	19
28.....	1,760	219	219	68	124	95	31	57	43
29.....	1,850	272	272	58	214	58	21	79	21
Median	488	\$265	\$254	\$ 98	\$163	\$101	34	61	39

Table I—Continued

Institution Number	SECTION C						Rating on Basis of Inspection
	Annual Carrying Load	Per Cent of Faculty with Ph. D. or Equivalent	Per Cent of Faculty with 2 Years or More Graduate Work	Per Cent of Faculty with A. M. or Higher	Average Years Graduate Training	Per Cent of Faculty Meeting Standards of Training	
1.....	173	33	66	92	1.91	42	1
2.....	290	32	68	84	1.84	56	11
3.....	292	19	57	81	1.58	19	8
4.....	300	35	80	90	2.05	60	5
5.....	300	15	25	90	1.40	15	3
6.....	338	28	42	60	1.29	55	16
7.....	356	36	43	82	1.61	64	8
8.....	360	35	35	88	1.59	35	5
9.....	370	23	27	60	1.18	57	8
10.....	370	48	48	90	1.86	76	7
11.....	421	40	40	80	1.60	40	1
12.....	427	17	61	91	1.69	39	10
13.....	437	30	63	78	1.70	64	11
14.....	462	28	52	80	1.60	64	9
15.....	488	41	41	91	1.72	41	8
16.....	500	40	52	92	1.84	52	6
17.....	528	27	37	66	1.29	54	11
18.....	581	28	64	100	1.92	36	5
19.....	592	41	65	88	1.94	59	6
20.....	600	38	41	76	1.56	56	13
21.....	648	50	75	93	2.18	64	2
22.....	828	35	35	82	1.51	70	15
23.....	957	35	42	89	1.65	62	12
24.....	999	28	56	87	1.72	59	10
25.....	1,328	49	59	88	1.96	75	14
26.....	1,345	32	43	89	1.70	49	7
27.....	1,567	28	39	89	1.56	65	4
28.....	1,760	29	41	77	1.47	64	13
29.....	1,850	29	29	72	1.30	64	12
Median	488	35	48	88	1.65	57	....

The techniques of computing the various items represented in the above tables are described in the articles in the *Quarterly* referred to. An analysis of the data in Table I, Sections A, B, and C, shows the following significant facts concerning the situation in the twenty-nine colleges studied:

1. The enrollments of the institutions (expressed as annual carrying load) vary from 173 in the smallest institution to 1850 in the largest. The median institution has an annual carrying load of 488.

2. Current educational expenditure includes only the items of administration, instruction, and operation and maintenance of the educational plant, and excludes such items as capital outlay, subsidies to athletics, and expenses of supplementary business enterprises such as dormitories and dining halls. Current educational expenditure varies from \$52,131 to \$554,881 with the median institution having an annual current educational expenditure of \$135,717.

3. Income from students varies from \$25,569 to \$396,212. The median institution has an income from students of \$79,272. Only such items of income from the students as are applied to the educational program are included.

4. Income from endowment varies from \$3,754 to \$279,177, the median institution having an endowment income of \$45,377.

5. Income from all other sources varies from no income at all in thirteen of the institutions to \$63,198 in one institution. The median institution has an income from all sources, other than students and endowment, of \$15,403. Income from other sources consists mainly of gifts by individuals and church boards.

6. Income from all sources except students ranges from \$14,364 to \$279,177. The median institution has an income of \$54,842 from all sources except students.

7. Average salary of full-time faculty members varies from \$1,910 to \$3,426, the median institution paying an annual salary to its full-time faculty members of \$2,408. Three of the institutions have average annual salaries below \$2,000. Eight institutions have annual salaries below \$2,250. On an a priori basis of reasoning, it is difficult to conceive how any institution can purchase an acceptable grade of instruction at an average salary as low as some of those indicated.

8. Annual current educational expenditure per student, which is total current educational expenditure divided by annual carrying load, ranges from \$144 to \$583; the median institution has a current educational expenditure of \$265. Five of the institutions have an expenditure per student of less than \$200 annually. Eleven have expenditures of less than \$250. Again, it is difficult to see how an acceptable grade of instruction can be purchased at a per capita cost as low as many of those indicated.

9. An examination of the data for educational expenditure per student shows that, in general, per capita costs are higher in the smaller institutions than in the larger. A careful study of this point by the writers shows rather clearly that such is the case among institutions of equal excellence, and that after an enrollment of 750 students is reached, the per capita cost does not vary with the size of the institution. Below this point the relationship between size and per capita cost, educational efficiency being held constant, appears to be such that the

very small institution has a much higher per capita cost than the larger. In consequence of this fact, it was determined in this study to weight the per capita costs actually found, to take into account the effect of the size of the institution. This weighting was made arbitrarily on the basis of other data in the possession of the writers which show that an institution of less than 350 students costs approximately 1.5 times as much per student as one of 750 or more students. An institution with an enrollment of 350 to 500 costs approximately 1.2 times as much per student as one with 750 or more students. In consequence of this fact, the actual per capita costs are weighted for institutions with enrollments below 350 by $\frac{1}{1.5}$ and per capita costs in institutions having enrollments from 350 to 500 are weighted by $\frac{1}{1.2}$. Institutions having enrollments greater than 500 are given a weighting of 1. Such a calculation results in a figure which is called "weighted expenditure per student". Weighted expenditure per student varies from \$144 to \$417, the median institution having an expenditure of \$254.

10. Income from endowment per student varies from \$9 in the lowest institution to \$282 in the highest, with a median of \$98.

11. Average annual fees paid by students (which means the same as income from students per student) varies from \$102 to \$493, the median being \$162.

12. Income per student from all sources except students varies from \$11 in the lowest institution to \$283 in the highest institution, with a median of \$101.

13. Per cent of total income from endowment varies from 2 per cent in the lowest institution to 63 per cent in the highest, the median being 34 per cent.

14. The per cent of income from students varies from 37 per cent in the lowest institution to 94 per cent in the highest, the median being 61 per cent.

15. The per cent of income from all sources except students varies from 6 per cent in the lowest institution to 63 per cent in the highest institution, the median being 39 per cent.

16. Five separate measures of training of faculty are presented. The first of these is per cent of faculty holding the degree of Ph. D or its equivalent. This varies from 15 per cent in the lowest institution to 50 per cent in the highest institution, with a median of 35 per cent.

17. The per cent of the faculty having two years or more of graduate training varies from 25 per cent in the lowest institution to 80 per cent in the highest institution with a median of 48 per cent.

18. The per cent of the faculty with training equal to or higher than that represented by the A. M. degree varies from 60 per cent in the lowest institution to 100 per cent in the highest institution, with a median of 88 per cent.

19. The average years of graduate training of faculty members varies from 1.10 years in the lowest institution to 2.18 years in the highest institution. The faculty of the median institution has an average of 1.65 years of graduate training.

20. The North Central Association suggests the following standards of training for faculties of colleges (Standard 5):

A. Heads of departments with a Ph. D degree or its equivalent

B. All faculty members holding professorial rank with at least two years of graduate training

C. No full-time members of the faculty with less than the Bachelor degree or its equivalent.

When the computation is made of the per cent in each college of faculty members who meet standards recommended for their respective ranks, it is found that in the lowest institution only 15 per cent meet the standards, while in the highest institution 76 per cent meet the standards. The median institution has 57 per cent of its faculty members meeting the standards of training.

21. All these measures, concerning which data have been presented, must be compared with some criticism in order to judge their effectiveness in appraising the excellence of a college. Such a criterion must necessarily be an independent measure of the varying degrees of excellence exhibited by the institution studied. It was impossible to find a thoroughly reliable criterion for use in this study. However, since one of the writers has visited each one of the twenty-nine institutions during the course of the collection of these data, has spent at least one-half day in each institution, and has made an intensive survey of several of them, it was decided to set up an independent criterion of excellence upon the basis of this observation, which included visitation of classroom instruction, conferences with faculty members, examination of libraries and laboratories, etc. This independent criterion, based upon observation and inspection, although admittedly fallible, is probably better than any other criterion available at the present time. The method of setting up the criterion was first to rank the institutions in order of their excellence from one to twenty-nine, a rank of "one" being given the institution of least excellence. When the ranking had been made, the writer

then grouped together all institutions where difficulty was found in distinguishing the ranking. This resulted in a final scaling of the institutions into sixteen groups which were assigned values from 1 to 16, "sixteen" being the rating given the institution of the greatest excellence in the opinion of the writer, and "one" being the rating of the institution of the least excellence. The judgments were made, as far as possible, without reference to the statistical material contained in the study, and every effort was made to exclude the influence of the statistical data from the final rating. This rating is denominated "rating on basis of inspection", the range of the ratings being from 1 to 16, the median institution having a rating of 8.

No illusions are held regarding the validity of this rating. The only defense for using it is that no other criterion was available. However, its reliability seems satisfactory, a correlation of $+.94$ being obtained between two successive independent rankings by the writer. A somewhat similar technique seems to offer the best possibility at the present time for developing a satisfactory criterion of excellence.

A question which immediately arises is that of the relationship between the various factors studied. Of prime importance is the question as to whether or not any of the factors show a sufficient correspondence with the criterion to permit reliable predictions as to the excellence of a given institution from some factor or combination of factors. In order to present an answer to these questions the technique of correlation is employed. While correlations with as many as twenty-nine cases involved are usually considered statistically sound, yet it should be borne in mind that the prob-

able error of the correlations presented is rather high, due primarily to the small number of cases on which the correlations are based. The size of the probable error should be constantly borne in mind

as a limitation of the coefficients of correlation that are presented. These coefficients are given in Table II. The probable errors of the coefficients of correlation are given separately in Table III.

Table II. Coefficients of Correlation (Pearson) Between Various Items of Educational and Financial Data for 29 Institutions Holding Membership with the North Central Association of Colleges and Secondary Schools

	1. Total Income from Endowment	2. Total Income from Students	3. Per Cent of Income from Endowment	4. Per Cent of Income from Students	5. Endowment Income per Student	6. Income from Students per Student (Average fee charged)	7. Weighted Expenditure per Student	8. Average Salary of Full-Time Faculty Members	9. Per Cent of Faculty with Ph. D. or its equivalent	10. Per Cent of Faculty with 2 or More Years of Graduate Work	11. Per Cent of Faculty with A. M. Degree or Higher Training	12. Average Years of Graduate Training of Faculty	13. Per Cent of Faculty Meeting N. C. A. Training Standards	14. Rating on Basis of Inspection
1. Total Income from Endowment	+582	+562	+293	.000	-.014	+127	+361	+436
2. Total Income from Students	+423	+458	+141	-.293	-.180	-.180	+451	+488
3. Per cent of Income from Endowment	+125	+096	+028	+060	+147	+167	-.151	-.045
4. Per cent of Income from Students	-.098	-.046	+107	-.207	-.117	-.152	+099	-.049
5. Endowment Income per Student	+375	+265	+183	+220	+136	+259	-.039	+078
6. Income from Students per Student (Av. fee charged)	+691	+570	+096	-.063	-.448	-.207	+158	+492
7. Weighted Expenditure per Student	+756	+268	-.006	-.296	-.031	+359	+717
8. Average Salary of Full-Time Faculty Members	+562	+458	+265	+570	-.307	-.041	+500	+712
9. Per cent of Faculty with Ph. D. or its equivalent	+293	+141	+028	+107	+272	+610	+548	-.077

Table II—Continued

	1. Total Income from Endowment	2. Total Income from Students	3. Per Cent of Income from Endowment	4. Per Cent of Income from Students	5. Endowment Income per Student	6. Income from Students per Student (Average fee charged)	7. Weighted Expenditure per Student	8. Average Salary of Full-Time Faculty Members	9. Per Cent of Faculty with Ph. D. or its Equivalent	10. Per Cent of Faculty with 2 or More Years of Graduate Work	11. Per Cent of Faculty with A. M. degree or Higher Training	12. Average Years of Graduate Training of Faculty	13. Per Cent of Faculty Meeting N. C. A. Training Standards	14. Rating on Basis of Inspection
10. Per cent of Faculty with 2 or more years of Graduate Work..	.000	-.293	+.060	-.207	+.220	-.063	-.006	+.177	+.255	.....	+.470	+.815	+.107	-.229
11. Per cent of Faculty with A. M. degree or Higher Training	-.014	-.180	+.147	-.117	+.136	-.448	-.296	-.307	+.272	+.470	.....	+.802	-.172	-.543
12. Average years of graduate training of Faculty	+.127	-.180	+.167	-.152	+.259	-.207	-.031	-.041	+.610	+.815	+.802	.....	+.148	-.400
13. Per cent of Faculty meeting N. C. A. Training Standards	+.361	+.451	-.151	+.099	-.039	+.158	+.359	+.500	+.548	+.107	-.172	+.148	.....	+.434
14. Rating on Basis of Inspection.....	+.436	+.488	-.045	-.049	+.078	+.492	+.717	+.712	-.077	-.229	-.543	-.400	+.434	.....

Table III. Probable Errors of Correlation Coefficients in Table II
(29 Cases)

When "r" is	P. E. is	When "r" is	P. E. is
.000	±.125	.450	±.100
.050	±.125	.500	±.094
.100	±.124	.550	±.087
.150	±.122	.600	±.080
.200	±.120	.650	±.072
.250	±.117	.700	±.064
.300	±.114	.750	±.055
.350	±.110	.800	±.045
.400	±.105	.850	±.035

The only factors which show any considerable predictive relationship with the rating on the basis of inspection are weighted expenditure per student and average salary of instructors. The coefficients of correlation between the rating and each of these factors are both above $+.70$. No measure of income from endowment yields a correlation coefficient with the criterion that can be considered high. As a matter of fact, the average fee paid by students seems to be a better income measure than does any measure based on endowment. Compare the correlation coefficient of $+.078$ for endowment income per students with that of $+.492$ for average fee charged students (which is income from students per student). Total income from endowment and total income from students yield correlation coefficients respectively of $+.436$ and $+.488$ with the criterion of rating on the basis of inspection. However, a considerable part of this correlation is in reality a self-correlation due to the tendency of institutions with high income to rank high on the rating scale. When the sources of income are presented on a percentage basis, that is, per cent of income from endowment, and per cent of income from students, the coefficients of correlation of these per

cents with the rating are both practically zero.

It is somewhat difficult to account for the irregularity of agreement among the correlation coefficients for the various measures of training with the rating on the basis of inspection. In only one case was positive correlation between faculty training and rating found—that case being when training is expressed as the per cent of faculty members meeting North Central standards of training. The five measures of faculty training fail curiously to agree with each other. The inter-correlations among these five different measures of training vary all the way from $-.172$ to $+.815$. Judging by the average inter-correlation, the best measure of training seems to be average years of graduate training, although this measure does not correlate positively with the criterion of rating on the basis of inspection.

The inter-correlations among the various other factors are interesting and in some cases significant. It is interesting, for example, to compare income from endowment and income from students as predictive of the other factors. When these two measures are expressed as per cent of total income, the correlation coefficients with the other factors are uniformly low, sometimes negative and sometimes positive, but generally within one probable error or zero, indicating absolute absence of any predictive relationship. In other words, knowing the per cent of its income that an institution receives from endowment, it is impossible to predict how much it will spend per student, what the average salary of instructors will be, what the training of the faculty will be, or what the institution will be rated on the basis of inspection.

However, when the source of income is reduced to a unit basis and expressed as "endowment income per student" or "average fee charged" (income from students per student), some significant relationships begin to appear. Endowment income per student correlates with weighted expenditure per student $+ .375$. Average fee paid per student correlates with weighted expenditure per student $+ .691$. In other words, a much closer relationship exists between the average fee charged and the expenditure per student than between endowment income and expenditure per student. If it be granted that expenditure per student is a significant measure of excellence, it will be seen that average fee charged students more nearly indicates this excellence than does endowment income per student. The correlation of endowment income per student with average salaries of instructors is $+ .265$. The correlation of fees charged per student with average salary of instructors is $+ .570$. Again a closer relationship exists between average fee charged students and salary of instructors than between endowment income per student and salary of instructors. If it be agreed that the average salary of instructors is a valid indication of excellence in an institution, then again it is seen that average fee charged students is more predictive of this excellence than is income from endowment per student. The correlations of these two factors with faculty training are not significant.

It has already been pointed out that correlations with the total income from endowment and total income from students represent a considerable degree of self-correlation with total income. Remembering this fact, it should be noted that the coefficients of correlation of

total income from endowment and total income from students with weighted expenditure per student are $+ .582$ and $+ .423$ respectively. Similarly, the coefficient of correlation between total endowment income and average salary of instructors is $+ .562$, while the coefficient of correlation between total income from students and average salary of instructors is $+ .458$. It is thus apparent that total income from endowment furnishes a slightly better prediction both of expenditure per student and of salary of instructors than does the total income from students. This apparently contradicts the previous finding regarding the predictive value of these two sources of income. However, it must be borne in mind that the differences in these correlation coefficients are not large when compared to their probable errors.

There seems to be no outstanding relationship between training of faculty and any particular source of income.

Of particular interest are the correlations between training and average salary of instructional staff. In every case but one these correlations are either very low or negative, the one exception being the correlation between per cent of faculty meeting training standards and average salary of instructors, which is $+ .500$. In other words, so far as the institutions as a group are concerned, there seems to be no attempt whatever to relate average salary paid in the institution to the average level of training of the faculty.

Attempt was made to build a predictive index through the technique of multiple correlation. A study of several of the most promising factors indicates that these data would probably never yield a predictive index on a combination of factors which would have a co-

efficient of multiple correlation higher than $+0.80$ with the criterion of rating on the basis of inspection. When two factors are considered in combinations as a predictive index, the three most promising combinations are:

(1) Salary of instructor and weighted expenditure per student

(2) Weighted expenditure per student and average fee charged students

(3) Weighted expenditure per student and per cent of faculty meeting training standards.

When three factors are considered in combination as a predictive index, the two most promising combinations seem to be:

(1) Average salary of instructor, weighted expenditure per student and per cent of faculty meeting training standards, and

(2) Average salary of instructor, weighted expenditure per student and average fees charged.

Conclusions

The question may be asked as to what the implications of this study are with respect to the standards of the North Central Association for the accrediting of colleges. The following are suggested as tentative conclusions:

1. The present standards of the Association for the accreditation of colleges are not resulting in a satisfactory state of excellence in every accredited college. One needs only to cite the enormous range of all the factors studied in proof of this point. With many institutions having average annual salaries of faculty members below \$2,000 and average annual expenditure per student for strictly educational purposes below \$200, it should be apparent without additional statistical proof that the present

standards for accreditation are not guaranteeing a satisfactory college.

2. The study presents no evidence to show that any of the present standards for accreditation should be discarded. However, it is evident that excellence is not dependent on the amount or proportion of income from any specific source such as endowment. The data clearly show that an adequate expenditure per student, regardless of the source from which the income is derived, is the important element to be considered. The endowment standard now in effect may be worth retaining as an assurance of stability, a factor obviously not considered in this study of the institutions. However, the endowment standard should either be justified on the grounds of assuring stability, or else it should be supplemented by a standard relating to expenditures per student for strictly educational purposes, disregarding entirely the source of the income.

3. Since the evidence is that present standards are not guaranteeing a satisfactory college, and in view of the fact that no evidence is found to warrant the discarding of any of the present standards, the only course left is to seek new bases upon which additional standards may be founded. The present study is not sufficiently complete to answer finally what these new bases for standards should be, nor to indicate such standards quantitatively; however, the data do suggest that one or more of the following three factors offer the greatest promise for additional and supplementary standards:

A. A minimum average faculty salary.

B. A minimum annual expenditure per student for strictly educational purposes

C. Enforcement of a satisfactory standard of faculty training.

The standard of a minimum average faculty salary is thoroughly logical, and should present little difficulty of administration. On the other hand, the standard of a minimum annual expenditure per student for strictly educational purposes would present certain difficulties in administration. In the first place, computation of this average in a reliable manner is not always easy from the present accounting systems of many of the institutions. In the second place, the average would have to be weighted on a sliding scale in accordance with the size of the institution. A standard of training for faculty members has already been set up but is not being enforced. The suggestion of a standard for faculty training involves nothing new in the way of policy.

4. If it should be decided to set up standards in terms of certain minima, a more complete study, based upon at least 50 institutions should be carried on in order to set up accurately the desirable minimum standards. Furthermore, after the adoption of such standards, a continuous study should be carried on to test the extent to which these minima are guaranteeing a satisfactory college. It is conceivable that a revision of these minima should be expected from time to time in order to adjust them properly to the changes in economic and educational conditions.

5. It is recommended that standards should be applied to the individual institutions through a personal inspection rather than through the medium of statistical reports.

If the tentative bases for standards suggested above are justified by a more

complete investigation, and if it should be decided to accredit institutions by personal inspection rather than by statistical reports alone, then expenditure per student could well be used as one of the standards, since the individual in charge of the inspection could apply a uniform technique in calculating expenditure per student. Such an inspection need not be made every year in every institution. Colleges clearly meeting the standards need be visited only every three or four years; those at or near the border-line should be visited more frequently.

It is obvious that such measures as the North Central Association has employed heretofore, as well as those which are suggested in this report are quantitative in character. They deal only with externals of excellence; they do not actually measure excellence. Sooner or later this Association must find ways of evaluating the quality of the work and of measuring the outcome of the instruction offered by the colleges. Experiment with comprehensive examinations and with every other device which seems likely to throw light upon the character of the results obtained by the colleges should be encouraged by this Association.

Recommendations

The Committee on the Cost of Instruction recommends that the following plan be adopted:

1. Provision should be made for a continuation of the study for the ensuing year, and arrangements should be made for the inspection of fifty or more institutions, this inspection to be made by at least three trained observers, each of whom shall visit all of the institutions inspected. The purpose of this inspection

shall be to establish additional bases for accreditation.

2. It is recommended that institutional members of the Association be urged to set up their accounting systems so as to disclose the annual expenditure

per student for strictly educational purposes.

Committee:

Donald J. Cowling, Chairman,
Lotus D. Coffman,
Floyd W. Reeves.

Checking Up on Ourselves

BY PRESIDENT W. W. BOYD*

WESTERN COLLEGE FOR WOMEN, OXFORD, OHIO

About four or five weeks ago, when I was trying to instruct our Secretary how to make out a program, I had just one suggestion to make. I told him he could have a free hand on every other part of it, but that there would be no inaugural address by the President of this Association this year. He took his instruction and left the word "inaugural" off. (Laughter) He put out his program.

I do want to express to this Association my very sincere, my very great appreciation of the recognition which you have given to the small colleges, and the honor which you confer upon a small college by intrusting to me the service of the presidency of this institution for one year. On account of the college I do express to you my gratitude.

After I saw the program I thought, "Well, there is some obligation upon me to say something." I wondered what it ought to be, and I happened to remember a little story that I had heard recently of a colored man who had stepped into a drug store. When he got in, he said, "Mister Druggist, does you have any objections to my using your telephone?"

"No, Sam. It is back on the counter. Help yourself."

Sam went back to the glass counter, lifted the telephone and said, "Seven-one-three-eight. Is dis Mrs. Gravitt? Well, is this the Mrs. Gravitt what advertised

for a colored porter about two weeks ago?"

"Yes."

"Did you get a man? Is he satisfactory? Is he a respectable man? Does you expects to keep him?"

Then he hung up the phone, turned around, with a broad grin, and said, "Thank you, Mister Druggist."

The druggist said, "Sam, hold on 'a minute. Are you trying to beat some fellow out of his job?"

"Nosuh, Mister Druggist, I took that job about two weeks ago, and I was just checking up on myself." (Laughter).

I thought possibly that was what we might do for a few minutes tonight.

A third of a century lies between our beginning and this occasion. Thirty-five years ago high schools and colleges were expressing some disgust with the attainments of each other. High school graduates were coming into colleges in many cases seemingly illy prepared to carry college courses. Therefore, college professors were severely criticizing high schools. The number of failures in colleges led our high schools to attack the heartless, unsympathetic methods of the colleges and to resent the needless exactions in college entrance requirements. As an outgrowth of discussion in the Michigan Schoolmasters club, it was thought it might be wise to bring the two parties to such a controversy together in friendly discussion for the pur-

*An address delivered on the occasion of the Annual Dinner in Chicago, March 15, 1928.

pose of harmonizing common interests. It was done. Both parties readily recognized that a gap existed between the two characters of institutions.

About the same time, a movement for the inspection of high schools was begun in several of the states of the Middle West. We cannot pay too much honor to the pioneers in this movement, Whitney of Michigan, Hollister of Illinois, Aiton of Minnesota, (now deceased) and many others. From many helpful suggestions for the bridging of the gap between the secondary schools and institutions of higher learning, and in an atmosphere of cordial cooperation developed the idea that we might use the results of the work of the high school inspectors in an effort to select those schools from which the colleges could accept students with some confidence that they would be able to carry college work. The experiment was tried and from it has grown the cumbersome and somewhat unwieldy machinery which has made this Association the greatest standardizing agency for schools in this country. As a college man I think I am justified in speaking for colleges generally within the bounds of the North Central Association when I say we have greatly appreciated the efforts and results of our high schools in sending to us on the whole better prepared students and we are most grateful for the very cordial cooperation of high school teachers. And while I can not speak for the secondary men and women, I believe there exists among them a feeling that the colleges have put forth eager efforts to understand the secondary schools and that there is in the colleges a growing sympathy with the problems of and demands upon the high schools which are very much wider than the mere question of preparation for college.

That there have been some disappointments is not surprising. Within the time of our existence there has been unheralded and almost unbelievable growth in both secondary schools and institutions of higher learning. This expansion alone has made it difficult to advance or even to hold standards. The increased cost of education adds difficulties. The changing and varying theories of what ought to enter into an education have a tendency to create chaos and uncertainty in our ranks. The disturbing thought that we are not "keeping up with the procession" is apt very often to lead us to do the wrong thing. Therefore, our colleges still acclaim what seems to be fairly well established that they receive many students not well prepared for college. And our high schools charge that "you fellows in the colleges do not know what you are doing, anyhow."

Again a new problem is facing us in organization. Where we had one gap to bridge before, we now have three. The junior high school makes a gap within the secondary school itself and already in Wisconsin the junior high school principals have banded themselves into an organization which seeks the aid of this Association in declaring their independence of the senior high school. The junior college has appeared and asks the standard college to accept its graduates into the junior year. Experience seems to tend to the judgment that it is more difficult to make college adjustments in the middle of the course than at the beginning.

Therefore, there is still work for us to do together. This afternoon we re-consecrated ourselves to our future tasks by the adoption of a new constitution in which we again set forth our purpose in the same old terms: our "object shall be

to establish closer relations between the secondary schools and the institutions of higher education."

It is our firm hope, I think justifiable in the fact of our established cooperation, understandings and patience, that we will make more rapid progress in the next third of a century than we have in the past third.

The standards which we have set up to measure the efficiency of our institutions are very mechanical and measure only a portion of the truth which we would like to know about each other. And yet they have proved themselves to be much better than none. They have assisted many of our institutions, both colleges and secondary schools, to attain much more than they could have done without them. But there are many intangible, elusive factors which enter into the training of a human being, the measurement of which seems to defy us at the present time. How can we know that the institution we examine to-day will be fully as strong tomorrow? What is the stability of the institution? Are its graduates prepared to enjoy life or just to make a living? Will they contribute something of service to the world? Will the power we put in their hands advance civilization or will it be a "wrench in the machinery?" Think of the great numbers of human qualities we want to produce in our students and then ask, "Do we know that we are producing them? Do we have any way of measuring the results? Or do we know what methods or machinery to set up to produce the results we want?" There is one of these elusive, desirable factors which we are missing in our national life and, as I believe, partly because we are too little concerned about it in our high schools and colleges. It is *culture*.

There is one standard which might be applied more rigidly which gives the inspector the right to pass upon the *esprit-de-corps* of an institution. But how far should be exercised that right? Certainly in the cursory examination which a limitation of time requires, it is not fair to depend upon the superficial judgment which would be formed. I want to dwell a little upon this factor as I believe it to be the key to all we are trying to attain in this Association. Of course, I am not thinking of polite conduct, acceptable manners, suave speech or an approved social code. These would be an outgrowth and expression of genuine culture. Neither am I laying stress upon the old Greek philosophy of culture, of the body, although I think there is a genuine work here for our institutions. When I see a young lady with painted cheeks, dauped-up lips, blackened eyebrows and inch-and-a-half glass pendants hanging from her ears, I am inclined to question a very distant removal from an Apache Indian. And when I see a young man not half dressed, but only one-tenth dressed, racing in or to some athletic sport on the campus, or on the street before the public gaze, I am sure there is much of the barbarian left in us. Such appearance is vulgar, immodest, indecent. When we by our indifference permit such campus scenes we are debasing the civilization in which we live. There is a culture of the body which we are obligated to encourage, an erect posture, a grace of movement, an ease of action, a self-denial in food and drink, healthy daily exercises, an attractive appearance—all of which may be accomplished much better without the vulgar displays I have spoken of.

But I am wanting to emphasize a culture of mind—that culture of mind which is much more than knowledge. We

are so much concerned with the so-called practical affairs of a very material age that we neglect the possibilities in the life itself. We are building larger factory rooms and forgetting the power house. We are so busy making engineers, lawyers, preachers, missionaries, stenographers, farmers, bookkeepers, clerks, foundry men, carpenters, etc., that we forget to make a human being. We are exploiting human lives for gainful purposes when we ought to be gaining human beings for real living purposes. Here are some of the things which ought to be acquired by intellectual culture:

First, a power of meditation, an ability to take counsel of one's self, a strength to keep apart from the world long enough to weigh and measure the surging inner thoughts which come to every individual. There is much to be learned from the monastic schools of the Middle Ages; but perhaps nothing contributed more to the development mentally than the daily retirement of each monk to his cell for a period of two hours. Napoleon Bonaparte was driven by poverty and the fact that he, being a Corsican, was not wanted by his companions in a French school to use a little corner of the garden for solitary study and reflection. His reason for doing this may have made him moody and resentful; but he himself attributed much of his power to that experience. In this age of action how much opportunity are we giving our youth to consult themselves? Knowledge cannot be poured in. Self-development is the only road to genuine education and the most we can do as teachers is to furnish the condition which promote self-activity.

Second, there is needed a desire and an ability to use a library—a culture of books. A great responsibility rests upon a teacher at this point. Perhaps no single

factor contributes more to the failure of freshmen in college than their abhorrence of and inability to use the library. They have come into college seemingly well prepared with high grades, having mastered their text books in the high school. In college they are thrown on their own resources, frequently never given a textbook, but assigned topics for recitation and told to go to the library and gather all the information they can on the given topics. They are lost. They go once a week "like a quarry-slave" and surely as though they were scourged.

Third, almost a corollary to the second, we have more need of training in music and art and nature. To live this life well is to put joy into it. Even in the very process of education a proper proportion of these studies stimulates and aids our efforts in other studies. Speaking personally, I have been conscious repeatedly that I have not entered into the full realization of a joyful life as many of my friends have done because I permitted myself to become so engrossed with work that I neglected the aesthetic development. Such development may seem very far from the utilitarian demand made upon our schools at the present time; but it would be a great stabilizer in the midst of confused and weary days. It would be a spring of fresh water to parched lips. Its refreshing quaff would revive lagging mental vitality.

Let me go a step further: We are concerned (or should be) not only in the development of human mental capacity, but also in how it is to be used. That brings us immediately into the province of morality. Some of us as teachers seem to act as though our obligations were discharged when we have faithfully kept our contracts within the intellectual field.

These are human beings with whom we deal. There is no true culture where there is not recognition of duty, obligation, opportunity, right and wrong. There is a duty upon every teacher to train his students in an admiration for and a practice of the virtues and in an abhorrence of all that is evil. There may be an instinctive quality in morality; but it needs training. We are in the training business. We have no right to say that that belongs to the home, the church or the individual conscience exclusively. It is in this field of morality that we transcend the scale of animal being. We cannot neglect it.

This brings us to the border of still another field. What is the final authority in right and wrong? Whence spring these mystic demands upon our very being? What was our origin? What is our destiny? Immediately we find ourselves trying to answer our questions by some system of religion. This instinctive reach for something far beyond our present ken cannot be ignored. While no system of religion may be taught in a state school, every opportunity ought to be used to magnify the faith and trust

which, common to all of us, we have in God. There is a limit to human knowledge. There is no limit to human aspiration. Bringing our students to the very edge of human understanding we need to leave them with the spirit of Whittier:

"I know not where His islands lift

Their fronded palms in air;

I only know I cannot stray

Beyond His love and care."

Ladies and gentlemen, that is my idea of culture. When our high schools bring to the doors of our colleges students who are eager for training, intellectual, moral, spiritual— and not for knowledge alone—they will cast upon our college teachers a much higher responsibility in bringing human qualities to maturity. There will be a new joy in our common work of trying to educate the youth of our land. Let us remember that we are not creating new forces, we are cultivating human beings. We may create machinery such as this Association is to aid in the cultivation. Our ultimate task is with the individual. Let our concern be with what he is going to be more than with what he is going to do. It is a great business.

What is a Liberal Education*

By THOMAS H. BRIGGS

TEACHERS COLLEGE, COLUMBIA UNIVERSITY

Mr. Chairman, Ladies and Gentlemen: Without the assent or permission of the Chairman, I am going to narrow the subject announced in the Quarterly and speak merely on one phase of it this afternoon. That phase is a definition of liberal education.

I shall take for my text a sentence from Francis Bacon in "The Advancement of Learning." "It is not possible to run a course aright when the goal has not been rightly placed."

Practically all discussions of secondary and higher education emphasize the liberalizing function. Often, perhaps usually, this is identified with culture. Probably there will be no dissent from the statement that the schools above the elementary grades should devote a large share of their energies to effecting a liberal education which is supposed to make men and women cultured. But discussion of means to this end at once necessitates a definition. Students familiar with the literature immediately recall numerous articles dealing with the topic, some of them superficial, content with palliating terms, but many presenting the result of profound thought.

It is with no disrespect for the great men who have discussed this phase of education that we recognize their failure to produce any pragmatic agreement among school men. This great master or the other is quoted, but it is difficult

to find any definition of liberal education that is generally held, and exceedingly rare to discover any curriculum or even a course of study that has been consistently developed on a proposed definition, however widely it be quoted.

It is with temerity, then, that one proposes another definition, but, as we are all more or less pragmatists today, we feel the necessity of some agreement that will direct the important phase of education which now concerns some 4,000,000 of our youth actually in high school, and the other millions that are on the way.

Certainly no one is satisfied with our present accomplishments during the period of formal education, and when attention is focused on the attitudes that are set up in youth toward the liberalizing subjects, and the consequent failure of them to affect, in any appreciable way, the lives of graduates, to say nothing of those who have left school before graduation, the extent of failure is appalling. The fault may not lie so much in the subject matter itself, as many modernists have maintained, as in the failure of educators to agree on what liberal education should accomplish.

It is with a recognition of these facts that one is emboldened to attack again the problem that has been so frequently discussed before.

Let us begin by asking what education above the elementary grades actually means in our lives. There is no negative implication in this question. There is

*An address delivered before the meeting of the Association, March 16, 1928.

merely the pragmatic assumption or implication that what does not make a difference does not exist, and that what does exist is important. During the past few years I have asked this question of many people, following it with others that forced as honest an introspection as it is possible to get.

Perhaps the best procedure for one attempting to answer the question is to recall in as great detail as possible some period of his life, a typical day, for example, and to ask concerning each thing that he did in what respect higher education made him act differently. When attempting this, one may at first be disappointed, the obvious results being so few. But, as William James quoted his carpenter friend as saying, "There aren't many differences, but those that are are very important."

The answers that I have got from different people I shall now comment on very briefly, neglecting all of those that pertain to our vocations, whatever they may be. The successful business man is very likely to give the answer that his higher education has trained his mind and disciplined his character. I have no intention of entering this afternoon on a rehash of the subject of transfer. Many people who are inclined to believe in the old doctrine of transfer are fond of emphasizing the differences among the experts. They point out the fact that Colvin, Judd, Thorndike, do not agree entirely with each other. But the fact is, of course, as any serious student knows, that Thorndike, Judd, Colvin, and all other students of psychology today are in entire disagreement with what practically everybody believed thirty years ago.

On the matter of discipline, which we are so fond of prescribing for other

people, I again take merely the pragmatist's point of view: That if we really believe in anything we prescribe it for ourselves. When I find someone saying to a child that he must do a task which is difficult and disagreeable, and otherwise useless, I always like to ask that person what he is prescribing for himself that he dislikes very heartily, that he finds very difficult, and that he has no other use for, except to strengthen his character and sweeten his spirit.

So I mention these two things merely to register them, and immediately to show that we have no real confidence in either of those answers. A second answer that comes many times from our academic colleagues is that knowledge for knowledge's sake is the end.

I have long since come to the point of not being flustered greatly by terms. Let's ask, for a moment, what on earth does knowledge for knowledge's sake mean. I can't conceive of it meaning anything more than a bathtub for bathtub's sake or a whiskbroom for whiskbroom's sake. Voltaire once said, "What facts are to history, that baggage is to an army, impedimenta," meaning of course, that baggage, all baggage is important to the army, but only in terms of the needs that the army is going to have for that baggage. The army carries with it tents in order that it may encamp comfortably. It carries with it a medicine kit, including the medicines that they expect to need for soldiers who may be ill. But the army rigidly eliminates from its baggage everything that does not promise to have some value to it.

It is the same way with the matter of knowledge. I am far from deprecating knowledge. I wish I had more of it, and I wish you had more of it. But that

does not mean that knowledge is important as a mere matter of acquisition. It means, of course, that we have not thought through our answer, and have been content to stop with a temporary phrase.

There is a third answer that is not frequently given, but ought to be registered nevertheless, and that is that our higher education frequently gives us an intellectual prestige and satisfaction. There is a certain amount of value in this, but there is also, at the same time, a great degree of danger. To illustrate the bad phase of it, I should like to quote from Gaisford, a master of Christ Church, Cambridge, in the Sixteenth Century. In addressing his students one day he said, "Learn Greek, young men, that you may read the oracles of God in the original and look down with contempt on the vulgar herd." (Laughter)

In so far as higher education gives anyone this attitude, in so far as it gives us a superciliousness, a contempt, a skepticism, of course, we deprecate that result.

A fourth answer that comes occasionally is that our higher education is so utilitarian. I should like to deny that. I should like to deny that outside of our vocations that there is any appreciable amount of the education in the high school or the curriculum that is of material utilitarian value. Why not be honest with ourselves, at least, and recognize that the value we get from our French and from our mathematics and from our science and from our history does not depend directly or even immediately upon the utility that these subjects have in contributing to our lives. What then is the answer if we do not find these proposed answers to be true? What then has our higher education con-

tributed? The answer seems to be absurdly simple. They have increased the number and variety and the depth of one's interest. The man of liberal education is interested in more things, in a greater variety of things than others, and his interests are less superficial.

It may be maintained that a man exists in proportion as he responds to the stimuli of the world. "The more good things we are interested in," says Bacon in the *Novum Organum*, "the more ardently do we live." Some pass along the road whether it leads by princes' palaces or poor men's hovels and are aware of little or nothing; others are dimly aware, but they have never been made curious. (A primrose by the river's brim to many is that and nothing more). And others still are curious but do nothing, often through ignorance, to satisfy their curiosity.

A little more than a year ago a cousin of mine, on his way back to China, stopped over in New York with his wife and little girl and had luncheon with me. After luncheon I said, "What do you want to do? I am entirely at your service."

He said, "I think Frances, the little girl, would like to go out to the Bronx zoological garden."

I was very glad he made the suggestion, because I like an excuse to go out there myself.

After we had looked at the camels and the elephants and the tigers and the giraffes, I found ourselves standing before a cage in which there was a small hairy animal hanging upside down to a limb by two toes of each foot. Being curious as to what he was and what he would do, I read the title on the cage "*Choloepus hoffmanni*." I made all sorts of foolish noises to attract his

interest and attention, but he never stirred. I got a pebble from the walk, flipped it into the cage, struck him, but again he paid no attention whatever. Finally another one of these animals began to climb slowly by his side. He seemed to have an inclination to give an embrace. He put out an arm about so far, and then apparently thought, "What's the use?" and put it back. (Laughter) Is there any wonder this animal is named the sloth?

We walked from this place over to the Primates' house where the monkeys were. As we went by the first cage every monkey was alert. We did not have to make any foolish noises to attract their attention. They looked at us intently, curious to see what we were and what we would do. Just for fun I rolled up a little wad of paper, flipped it in the cage and the monkey was down immediately picking it up, pulling it apart, monkeying with it, in fact, to see what it was. (Laughter). I began to smile. My cousin said, "What are you doing?"

I said, "I am just classifying my acquaintances, those in one direction with no curiosity, simply hanging, existing, feeding, sleeping, and mating, and the others alert and curious and responsive to all the world about them."

Is there any wonder that the monkey is the most intelligent of our animals? I wonder sometimes why many people seem to be offended when the scientists suggest we are descended from monkeys. Many of us ought to be complimented. (Laughter)

So I say that some pass along the road, whether it be by princes' palaces or poor men's hovels, and are aware of little or nothing; others are dimly aware, but they have never been made curious, and

others still are curious but do nothing, often through ignorance, to satisfy their curiosity.

I think we ought to develop our youth to be like Kipling's elephant child with the insatiable curiosity. I don't know whether the natural history in that story is true or not, that the elephant's child actually got his trunk through his curiosity, but I know what is symbolized is eternally true in what we call liberal education.

All these, whatever honors have been conferred upon them, do not have a liberal education. It does not free an individual. Rather it implicates him in such a variety and number of phases of this wonderful world, that he pursues one interest after another, building more stately mansions for his soul to the end of his days. No education, how worthy the name, ever stops. Finishing schools, by whatever name they go, are all too common in this land of ours.

Of course, it is readily granted that responsiveness to the phenomena of the world is largely determined by nature. But it is obvious that liberal education has, to some extent, increased this responsiveness in each of us. It is now argued that it is a primary responsibility consistently to attempt this result with all students in all courses. The extent to which one has a liberal education may be measured by the number and the variety and the depth of his interest. He is alert to a wide variety of the phenomena of the world, and he responds to them in no superficial way, calling on his training to secure from mathematics, the social studies, the sciences, and the languages, answers that not merely give him intellectual satisfactions but also lead to other and wider curiosities and satisfactions.

When such a thesis as this is proposed, someone is certain to declare that it advocates soft pedagogy, it deprecates hard work. Nothing could be farther from the truth. It does deprecate drudgery meaningless to the student. But acceptance of the definition produces a larger amount of intelligent work than is ever obtained otherwise. Knowledge is possible without interest, but interests, such as I am talking about, are not possible without knowledge.

I frequently tried a simple experiment on my classes. I have asked, "How many of you have had as much as two years of Latin?" and the hands would go up. "What are the verbs that take the ablative case?" and immediately they would respond, "Utor, fruor, fungor, potior, vescor."

Then I would ask them simply to write the translations of those five verbs. I never have yet found a class of graduate students who could give this rule of the verbs that take the ablative case, 60 per cent of whom could write the meaning of all five of the verbs.

So I repeat, without any fear whatever of successful contradiction, that knowledge is possible without interest, but true interests are impossible without knowledge. That is, if you get the knowledge and the interest, it leads on to knowledge and mastery.

This fact, perfectly obvious on a moment's reflection, makes an immediate and important contribution to the program of liberal education. It reveals that knowledge is not sufficient as an end in itself. Thus sought, it is too frequently unrelated, unused and lost. Interest should be sought or established and utilized for the acquisition of needed knowledge. This, then, has meaning, and is much more likely to be retained and

used for carrying on through other interests to new and larger satisfaction.

It is absurd to think that interest can be maintained without knowledge, knowledge that grows from more to more. It is even more absurd to think that knowledge sought as an end in itself, with sufficient frequency to justify the labor, results in anything worth while. As a matter of fact, it is seldom retained long enough to respond to later needs. "It is only by amusing one's self," says Anatole France, "that one learns."

During the past few years I have read more than 2,000 papers written by graduate students, most of them active as administrators in secondary schools—papers that tell the history of some keen interest outside their vocation. Although one record from each student does not tell the whole story, the composite is believed to be largely indicative of conditions as they are. The reported interests range over the whole universe, from architecture to tomb-stones, but fewer than 3 per cent of these more than 2,000 reported interests are traceable directly or indirectly to the curriculum of the high school or the college.

Is it not reasonable to expect that the graduates of our secondary schools and colleges should have established in them, by courses in science, mathematics, history or language, interests which should be sufficiently dominant in their lives to demand reporting?

Certainly all of these subjects have such values to make the world intelligently interesting that they should be so presented as to result in an education liberal in the sense of the proposed definition.

As I said before, a person is merely the sum of all his interests. Whence have come the reported interests? The

great majority from personal contagion. A mother who had a passion for flowers, a father wise in his knowledge of Greek vases, a teacher inflamed with the mystery of the heavens—from such as these have come the interests that seized upon others and inspired them to pursue knowledge for the satisfactions that it gives.

I like to think that enthusiasm means filled with the spirit of God. I like to think that it is only as one is filled with the spirit of learning, as he is filled with enthusiasm for the subjects that he is teaching, that he is enabled to enkindle similar passion in others.

The application to education is, I think, obvious. Teachers who are on fire with the subjects that they present are the ones who can enkindle the interests that burn toward liberal education. A pedant whose knowledge is too dull to enkindle others does not have enthusiasm. Personal enthusiasm, then, is the chief ignition, and conveying over barren beginnings to assured initial success is the best fuel.

The only real success is that which either endures actively or smolders, ready on occasion to burst into the flame of active interest. "God pity the man," said Sanderson, "without enthusiasm."

These reports show, too, that most of the enduring interests were initiated between the ages of 10 and 15; not all, but most of them.

Jean Paul Richer once said, "If youth be not golden, age must be but dross." This we may paraphrase: If education does not, through the subjects of the curriculum, establish in youth interests that lead on, the adult is likely to have nothing of the culture which we profess to impart.

I studied geometry once, and one of

the things I learned in geometry, which I still believe, is that the whole is equal to the sum of its parts. If we don't get culture and interest today, and some more culture and interest tomorrow, and a third draft of the same thing on the next day, we are not going to have, mysteriously, any accumulation of culture or interest at the end of the period of study.

What is interesting? Everything. Almost every person who has had the experience of learning through someone who knows and is enthusiastic finds things that we perhaps passed 100 times and did not care to see, fascinating. The structure of a fugue or of an atom, a formula in chemistry or physics, a Greek subscript, a corn root louse, a medieval monk, the clinging tendrils of the antelope, a bird flitting among the syringa, a stone from the field, an ode from the Anacreon, each has its interest, but usually it needs first to be shown us.

If a teacher does not have interest, I may even say enthusiasm, for the subject that he is engaged to present, he is of small value in inculcating liberal education. The mere possession of interest is not sufficient. He must seek to awaken this in his students. This is a definite obligation. When satisfied, liberal education results.

As strange as it may seem, everyone has interests. They may not be, indeed they usually are not, the interests that the instructor wishes at class time to awaken, but they are his. Such interest as one has is the beginning of his culture. Any interest is better than none. Any headway is better than none if you desire to direct a vehicle toward a certain goal. It is through their development, enrichment, and direction toward worthy ends that liberal education comes.

When examined impartially the ordinary class procedure is a strangely arbitrary thing. A score or two of human beings, each one alive with interests of his own, enter a class room and are enjoined to lay aside their interests, their intellectual lives, and attend to what the instructor has to offer. It is well and good if he has an interest of superior importance to impart and enthusiasm to share. It cannot be so if even for the poor bread, a stone is offered. Not only does everyone have interests, but he has a right to them. They should be respected even though they have not been previously shared. As evidence of his intellectual life, they may indicate lines of growth, but they can seldom be ruthlessly ignored, or uprooted with expectation that better ones may readily be substituted.

It is easier to direct an interest, even what we consider the trivial or the bad, than it is to create a new and better one and then direct that.

Some years ago I was floating in a canoe on the crystal waters of a New England lake, and my attention was attracted to the sunfish swimming in a peculiar way. On observing them, I found the male sunfish were building their nests. I had frequently seen the completed nest, but this was the first time I had ever had the opportunity of observing the process. In a square rod there probably were 20 or 30 of these sunfish making their nest, or in the various stages of operation. So I paddled around and watched them. I saw the male swimming around and around, flirting his tail, stirring up the silt on the gravel. I wondered how it got off. So going ashore I got a string, tied a weight about five inches from the end, and lowered it, and found, as I sus-

pected, there was a slight current that drifted it away. After the male had swum around and made a large enough gravel pit, the female came, and after the usual love play, deposited the eggs, and bade her lord and master farewell. She is the freest female I know anything about. The male then undertook the task of fertilizing the eggs, protected them by swimming around and around, driving off any predatory neighbors, until after three days they were hatched, as I found out by diving and taking up the eggs, and looking at them with my little pocket microscope.

Being fascinated with this observation, I called my children who were on shore, and said, "Come down here, I want to show you something." As they were well trained children they came, got in the canoe. I paddled them out and explained to them what I had seen. They said with one accord, "Isn't that interesting. Let's go ashore." (Laughter)

I could have wrung their respective necks. Here I had found a tremendously interesting thing. I had worked it out, developed an enthusiasm over it, called them to share it, and they had come obediently, and politely said, "Well, what on earth are you excited about? Take us back to shore where we can do something that is worth while."

I went up on the porch, lit my pipe, sat there and puffed. I don't know which got hotter, my pipe or myself, until the thought struck me, "What are they interested in? What are they interested in that makes them hurry back to shore away from what I am interested in?"

After all, is a silly little sunfish the most interesting in the world, when you take a perspective of it? The boy who

was about ten and one-half years old at the time was building a bridge, a little toy bridge, almost completing it. I sat and watched him, looked at it, and the challenge came to me, "What can you do with his interests? Instead of demanding that he leave his interests and come with you, (the easy thing, the convenient thing for me) what can you do to contribute to his interest?"

I said, "Do you think that bridge will hold weight?"

He said, "I think so."

He finished it in a few moments and put it between the supports, put a weight in the center of it, and it collapsed. I said, "What was the matter?"

"I guess I didn't have enough lumber in it."

I said, "You had enough lumber in there to hold up an elephant."

"What was the trouble?"

I told him to go out to the barn and bring four laths and four wire nails. At my direction he nailed them in a quadrilateral with overlapping ends. I said, "Let's see if you can wiggle that figure."

He wiggled it. From a quadrilateral it became a diamond, and finally almost a line. I said, "Take out one of those laths and make a triangle." He nailed the three together. I said, "Let's see you wiggle those." He tried, and they wouldn't wiggle. That moment I taught this ten-year old boy that when one triangle has three sides homologous to the three sides of another triangle, they are equal. We did not use that language, but that is what he learned. I told him how engineers and bridge builders and architects use the triangle because it would not wiggle. We went out in the barn and saw the triangles there. In the afternoon when we drove to town, we stopped at the bridges, and he found

all the triangles possible. When we came back we got a pencil and paper and drew bridges of various designs and asked the question, "When all the weight is at this point, what happens?" He saw how the floor would tend to sag, and yet how the weight was distributed. We studied the elements of stresses and strains. It was very much easier to say, "If you are not interested in my sunfish, you stay in this afternoon until you are interested in them." It was very much easier to say, "If you are not interested in my sunfish, you are a silly ignoramus and you will be sorry for it some day." But it is a hard thing for any of us to take ourselves up to a prearranged program, and start with the interest that the child has and accept the challenge of leading that on to something that is worth while. Yet, it is only as we do that, that we are developing this thing that we call liberal education.

It is easier, as I said, to direct an interest even in what we consider the trivial or the bad, than it is to create a new and better one and then direct that. But the easier alternative is no small challenge. It requires, first of all, an alertness to find another person's interest, and then a willingness to reorganize our plan, usually a traditional plan that may not even be ours, and proceed from the student's point of view.

The necessity for the so-called logical organization of subject matter is much less than is ordinarily declared. Frequently it is an excuse for laziness or incompetence. Having accepted interest, intelligent interest, as an objective of liberal education, and having realized that interest leads to interest, the instructor has a challenge worthy of his highest ability.

The principle here advocated is basic

to the best procedure, whether we call it the project or the honor course. In the last analysis, of course, one is responsible for his interest. Teachers properly attempt direction and stimulus, but the achievement is determined by the individual. However obvious this self-determination is to us, it is rarely perceived by youth. Far too frequently he lays the responsibility for his academic progress wholly or almost wholly on the instructor. What he asks is, "What do you want me to do next?" With varying degrees of willingness, he responds to the demands laid upon him, preparing his lessons, making his recitations, performing the tasks of laboratory and shop. But unless interests are set up, when the pressure is relieved, he passes blithely and thankfully on to those matters which extra scholasticism has proposed, and which he accepts as interesting and worthy of his best efforts.

The failure of our students to carry on, either in school or outside, activities in academic fields after requirements are satisfied is probably the most tragic evidence of the failure of our problem of liberal education.

I hope you will notice that I am not an iconoclast. I am not throwing bricks at mathematics or at Latin, or at the traditional subjects, because I believe little progress is made in that way. But I can't help calling your attention to one fact illustrative of this neglect of what has been achieved. In one of our famous eastern women's colleges, four years of Latin are required for admission. I have no quarrel with a college that requires four years of Latin for admission. Presumably they want students who have that type of mind, and yet in this very college, of all those intelligent, brilliant, able girls that enter the institution, only

10 per cent of them take the subject after they have passed the barriers and been admitted.

In your own North Central Association, you have a miserable rule here that permits approval of two years of Latin. What does anybody get in that? If he does not get the interest that carries him on for an acquisition in this great field of learning, what has he got? As Whittier said several years ago in the *Atlantic Monthly*, all that he had after two years of Latin was the ability to say, "Amabo, amabas, amabat." (Laughter)

It is gratifying to see you remember so much as that. (Laughter). Every youth should from time to time be led to consider what he will be, what he wants to be in ten years, in twenty years, not vocationally, but intellectually, what resources he will have for making his life outside his business satisfying. In attempting this, he must inevitably consider his curriculum, and its worth. As a result, he may, if sufficiently clear-headed and courageous, throw up the whole business, seeing no relation of what he is doing with what he wishes to do and be. Probably he should do so, unless his teachers are able to justify his intellectual program in terms of his present and future intellectual needs. This they can do only by involving his interest.

I have elsewhere shown the tremendous, though often ignored, importance of the emotionalized attitudes in determining the activities and the destiny of men. They condition the reception and the retention of ideas. They influence their interpretation. They integrate mankind, binding together those that feel alike, concerning any matters whatever, including the stores of intellectual interest, and, more than anything else, they

stimulate activity.

The argument is wholly convincing to any one who will give it consideration, and it leads inevitably to an emphasis on the thesis that we are now considering. The program of liberal education must aim first at discovering or creating interests, and then directing them towards desired ends, rather than at inculcating facts—knowledge, if you prefer the term—in the blind and often fruitless hope that it will engender permanent interests. Favoring attitudes, each one with some degree of concomitant emotions, are essential to the reception and retention of that which is presented and to its proper interpretation and application. This will bind us together, bind together those who are truly masters of the arts, and for such attitudes, interests are essential.

It is an obligation, then, of the institutions that attempt the impartation of liberal education, to discover and to create interests, to make students aware of their value, to respect them, to direct them, to feed them and convey them over barren beginnings, to intensify them, and to lead them to ends considered worth while, and, so far as possible, to establish approving attitudes which impelling to satisfying activities set up persisting habits. It is an obligation to do this, not an incident done fortuitously, but primarily and assuredly. We deplore the lack of concern that our former students have in the best that has been said and thought in the world. We aspire to have their avocational lives rich by continuing and growing intimacy with the intellectual wealth which has been revealed and, to an extent, imparted in the class room.

Our success and theirs depends on the establishment, chiefly during the school

years, of interest. It is best measured by the number and the variety and the depth of the interests that they have and continue to have in ever increasing amounts.

Nothing has been said about the means of accomplishing the desired end. They would require more space than is now available. Nor is it necessary or, perhaps, desirable to attempt a presentation to teachers skilled in their own peculiar fields. If they whole-heartedly accept the thesis, if they realize that the beginning of liberal education and its continuance depend on interest, they will find the means, more and better means than any single individual can suggest, and self-originated means are better than those handed over by others.

The traditional subjects of the curriculum have from time to time been vigorously attacked by those dissatisfied with results, and skeptical of improvement. Curriculum makers are proposing new subjects and new phases of subjects which still further put on the defensive the traditional program.

I very much doubt if we are going to depart materially, for some years to come, from the science, the mathematics, the languages, the social studies that have been the pabulum of generations. But if they survive, they must adopt the basic doctrine of interest. This will necessitate a new attitude on the part of teachers and constantly new plans of organization, rather than a revolution in content.

Ulysses reflected with pride and pleasure on his adventures with cities of men, and manners, climates, counsels, governments, and drunk delight in the winning of Troy. "I am a part of all that I have met."

Similarly, we should conceive of our

graduates of high school or college reflecting with pride and with pleasure on their adventures in the no less thrilling fields of the sciences, adventures that

lead on and on to the comforts of Ithaca. They have become a part of all that they met. (Applause)

High School Library Study, North Central Association, 1928*

(A Committee Report)

I. HISTORY

In 1918 the North Central Association adopted a set of library standards for high schools. This was done because it had even then become obvious that the library is an essential factor in the secondary educational scheme of today. It was equally clear that professionally trained librarians are essential. The recognition of these facts at that time was a long step in advance and the action then taken bore fruit. To ascertain how much fruit it had produced and to decide, if possible, on methods for improving the orchard then set out, your committee was instructed in 1927 to make a study of North Central Association high school libraries.

We applied for aid to the Education Committee of the American Library Association and found that in 1926 the Chairman of this committee, Miss Harriet A. Wood of St. Paul, had appointed Miss Martha Wilson, librarian of the Lincoln Library, Springfield, Illinois, to work out a survey outline. In conference with instructors and librarians at the A. C. A. Institute for Instructors in Library Schools held at the University of Chicago in 1926, Miss Wilson devised a score card for measuring high school libraries. Since then this score card has

been reviewed, criticised, and refined by the aid of many library experts from a wide range of territory.

In April, 1927, our North Central Association committee decided to use it as the basis of our proposed survey of high school libraries. It was accordingly tabulated and numbered by Miss Marion Lovis, Supervisor of Public School Libraries, Detroit, Michigan. Mr. P. T. Rankin and Mr. M. E. Irwin of the Department of Instructional Research, Detroit, Michigan, took charge of the printing, distribution, and tabulation.

The score card called for 59 items and returns came in from 1,153 schools, making a total of 68,027 items to be checked. To accomplish this there were made, under the direction of Mr. Irwin and Mr. Rankin, 24 tables totaling 62 pages of the Quarterly. The results, however, have been boiled down to eleven tables covering eleven printed pages.

For most practical purposes these will suffice, because they constitute a yardstick with which principals or librarians can easily measure their own libraries. The results thus secured can be used to bring about improvements. They will also be used by the North Central Association, we hope, to set up quantitative library standards for our schools.

From what I have said it will be seen that we are indebted for the plan of this project to Miss Wood, Miss Wilson, and Miss Lovis, and for its execution to Mr. Rankin and Mr. Irwin. We owe

*The members of this committee are: E. L. Miller, Detroit, Chairman; W. E. Irwin, Detroit; Marion Lovis, Detroit; P. T. Rankin, Detroit; Martha Wilson, Springfield, Ill.; Harriet A. Wood, St. Paul, Minn.

them a vote of thanks. My personal share in the work has been negligible. I am only a reporter of their labors, and, I fear, like most reporters, unaware of the real significance of the things I am trying to explain.

II. TABLE NO. I

Our first table shows the number of schools reporting by states and by size of schools. For the latter purpose the schools are divided into five groups: (1) Below 250; (2) 250-499; (3) 500-999; (4) 1,000-1,999; (5) 2,000 up.

Of the 2,092 schools in the North Central Association, 1,115 replied, a percentage of 53. The percentage of schools replying in each state is indicated below:

Rank	States	Per Cent Reporting
1	Wisconsin -----	72
2	West Virginia -----	70
3	Indiana -----	69
4	Arizona -----	60
5	Michigan -----	60
6	Kansas -----	58
7	Ohio -----	57
8	Minnesota -----	56
9	Missouri -----	55
10	New Mexico -----	54
11	South Dakota -----	52
12	Illinois -----	51
13	Arkansas -----	50
14	Wyoming -----	49
15	Colorado -----	49
16	Iowa -----	40
17	Oklahoma -----	39
18	Nebraska -----	38
19	Montana -----	37
20	North Dakota -----	32

The percentage of schools reporting may indicate the development of the school libraries in a state and the interest in them. It does not seem to depend

on whether the schools are large or small, though this may, in some states, have been a factor.

III. CHARACTERISTICS OF LIBRARIES

Table II, on the characteristics of the average school library reported, shows first the median number of librarians. The report from schools under 250 reveals a median of 1.2 librarians, which is higher than the number indicated for schools between 250 and 999, and suggests the need of a technical definition of the word *librarian*. We propose the following, which is taken from the 1927 report of the American Library Association: "Someone who combines knowledge of books and library technique with sufficient knowledge of educational methods to make the library an integral part of the school's educational scheme and not an appendage or an extra curriculum activity." To get a sufficient supply of librarians meeting these qualifications we need to insist on a standard of preparation calling for at least four years of college training, divided as follows:

- (a) Academic studies ----- 75 hours
- (b) Education ----- 15 hours
- (c) Library training ----- 30 hours

The results shown in the table lead us to recommend as tentative and attainable standards the following:

1. Number of Librarians

- (a) Below 250 ---- 1 half-time librarian
- (b) 250-499 ----- 1 librarian
- (c) 500-999 -- 1 librarian + 1 half-time librarian
- (d) 1,000-1,999 ----- 2 librarians
- (e) 2,000 up -- 2 librarians + 1 half-time librarian for each additional 1,000 pupils or major fraction thereof.

2. Number of Volumes Per Pupil

(a) Under 250.....	10
(b) 250-499	7
(c) 500-999	5
(d) 1,000-1,999	4
(e) 2,000 up	3.5

3. Number of Pupils Per Seat

This should not exceed ten in any school. It is noticeable that the situation in this respect is least satisfactory in the largest schools. We suggest as a rough measure of the library space in any high school that this department, which should serve one hundred per cent of the children, is entitled to as much space as any department which serves less than fifty per cent of them.

4. Quality of Books

Books should be bought from lists set up by experts. Mere numbers are misleading. Gifts should be subjected to careful scrutiny.

IV. SCORES REPORTED

Table III shows the distribution of the percentages assigned by school principals and librarians to their own schools. It seems to indicate a sincere and healthy dissatisfaction with existing conditions. Probably it is fair to infer that the schools not reporting would fall below those reporting. This table should be of value to those principals and librarians who wish to measure their own libraries.

V. CONSOLIDATED FINDINGS

Table IV is a consolidated report of the showings made in the large divisions of the detailed score card. An analysis made by adding the scores, dividing the sum by 5, and ascertaining the percentage of the composite score thus attained, yields the following rank order ratings:

Rank	Items	%	Below 250	250- 499	500- 999	1,000- 1,999	2,000 up
1.	Annual acquisitions	100	100	105	100	99	100
2.	Subject range of book collection.....	99	97	100	100	100	100
3.	Book selection policy	96	93	95	99	99	100
3.	Location	96	100	93	96	96	96
3.	Furniture	96	92	94	99	99	99
4.	Amount of service.....	94	94	94	99	100	100
5.	Appropriation	93	93	93	93	93	93
6.	Service to teachers	89	72	81	97	97	97
6.	School control and administration	89	70	85	95	95	95
7.	Periodicals	85	60	90	90	95	95
8.	Duties of librarian	79	67	75	79	90	87
9.	Service to pupils	78	80	77	69	62	83
10.	Size	77	92	90	89	70	52
10.	Number of suitable books	77	95	90	85	70	52
11.	Qualifications of Librarians	76	64	71	80	82	83
11.	Status of librarians	76	72	76	80	76	76
12.	Division of appropriation	75	73	70	77	77	75
13.	Equipment	65	60	65	50	80	85
13.	Other kinds of material	65	30	40	85	90	95
14.	Extra-curricular use	40	25	35	42	50	55
15.	Supplementary rooms	14	10	10	10	20	20

From this analysis of the table two facts appear with startling distinctness: First, the service to teachers is better than that to pupils; second, the worst thing about our library service today is the fact that our pupils are not using our libraries for the pleasure of reading.

The big schools make a better showing than the small ones in all of the items except size and the number of suitable books.

VI. FINDINGS IN DETAIL

Tables V-X show in detail the material already revealed in Table IV. It is so specific that it does not require detailed explanation and so extensive that detailed explanation is impossible in a verbal report. It deserves and we hope it will receive the careful scrutiny of principals and librarians.

VII. SUMMARY

By way of summary we call attention to the following points:

1. The library today is an essential factor in secondary education.
2. Nearly half of our North Central Association high school principals seem to be unaware of this fact. At least they did not reply to our questionnaire.
3. We need a more exact definition of what constitutes a librarian.
4. The number of volumes per pupil needs to be greater in a small than in a large school.
5. The number of pupils per library seat should be larger than it usually is.
6. The quality of books should be carefully scrutinized.
7. Our tables constitute a measure of school library efficiency.
8. School libraries should be so organized as to serve pupils rather than teachers.

9. To cultivate the habit of reading for pleasure should be one of the fundamental aims of the high school library.

VIII. RECOMMENDATIONS

We recommend:

(1) That the Secretary of the North Central Association be instructed to prepare and send to Miss Wood, Miss Wilson, Miss Lovis, Mr. Rankin, and Mr. Irwin suitable letters of thanks for the great services which they have rendered us in making this study.

(2) That the officers of the American Library Association be authorized to use the study in any manner which they may deem beneficial to their organization.

(3) That our Committee on Standards for Secondary Schools be requested to formulate quantitative library standards for North Central Association schools, the same to be recommended for the guidance of schools during a reasonable period, and at its expiration to be required.

As possible standards we suggest the following:

1. *Librarian*

(a) Degree including 15 hours in education and 30 in library training.

(b) Same pay as teacher.

(c) Student load not exceeding 300 a day.

2. *Use of Library*

(a) Library should not be used as a study hall, but study halls should be made into libraries.

(b) The fact that knowledge of the use of a library is an effective aid to study should be recognized.

3. *Book Collection*

(a) Should be balanced. Use standardized lists prepared by the American Library Association.

(b) Avoid textbooks, miscellaneous gifts, subscription sets, university texts, professional books for teachers, and modern adult fiction.

4. *Budget*

(a) Books—\$1.00 a year for each pupil.

(b) Periodicals—\$75 a year.

(c) Binding—Use reinforced binding \$100 to \$150.

(d) Supplies—\$75 to \$150.

(e) Equipment —\$1,200-\$2,500—Initial collection of books \$4,000. L C cards, 6c a volume.

Two documents on "The Model High School Library" and on "What Constitutes Effective School Library Service" have recently been sent out by the American Library Association and afford a vivid picture of an ideal high school library situation. These documents are as follows:

The Model High School Library

HAS

A reading room near the study hall which seats 10 to 25 per cent of the school's enrollment.

Conference and lecture rooms.

A librarian's work-room with running water.

Standard equipment including adjustable shelving, comfortable tables and chairs, filing and display cases, a magazine case, and bulletin boards.

A book collection approximating six books per pupil and providing—

Books for ready reference.

Books supplementing classroom assignments.

Books and magazines for the leisure hour, at home and at school.

EMPLOYS

For the large school—

A full-time librarian who is a college

graduate and has completed at least one year in an accredited library school.

A full-time professional assistant to the librarian for every 1,000 students.

For the small school (enrollment 200 or less)—

A full-time librarian with qualifications as above or

A part-time librarian who is a college graduate and has completed an accredited library science curriculum of at least 16 semester hours, and who divides her time between the school and the public library or between school library work and teaching, and devotes at least half of each school day to school library service.

EXPENDS

For books, \$1.00 a year per pupil enrolled.

For library salaries, amounts equal to those paid teachers with equivalent professional training and experience.

PROVIDES

Systematic instruction in the use of books and libraries.

An opportunity for each pupil to use the library for reference and general reading.

Intelligent service to the classroom teacher.

A center for socialized activities.

STIMULATES

The use of the public library.

The desire to possess books.

Habits of independent investigation.

Reading for pleasure and profit.

The development of correct reading tastes.

Has Your School a Model Library

Your local library, your state library extension agency, or

The American Library Association,

86 East Randolph Street, Chicago, Illinois, will be glad to give expert advice. Write for descriptive leaflets and lists of publications.

WHAT CONSTITUTES EFFECTIVE SCHOOL LIBRARY SERVICE

The American Library Association believes that a school library is an essential of the modern school, and that expert librarianship is the most important element in effective school library service.

The effective school librarian is one who stimulates in boys and girls a wholesome curiosity about books, and a desire to possess books; who helps to develop correct reading tastes, and encourages reading for pleasure and profit; who provides for pupils systematic instruction in the use of books and libraries, and for teachers and administrators intelligent professional service; who makes the library a center for the socialized activities of the school.

Expert school librarianship presupposes professional preparation including college graduation, or its equivalent, and the completion of (1) at least a year of work in an accredited library school or (2) an accredited school library science curriculum of not less than 16 semester hours. It also includes sufficient courses in education, or their equivalent in teaching experience, to provide the necessary educational background.

School administrators desiring effective school library service will find it advantageous to consult with the local library or the state library extension agency as to the best methods for securing it. They will provide in their budgets for salaries comparable to those paid for expert service in other departments of the school. They will make generous provision in pupil programs for the use of the library, and whenever possible, will so arrange the schedule of the librarian that she may give her entire time to the library, unhampered by other school tasks. Only so can the library be made a vital and active educational agency.

Professional training for school library service must be provided by colleges, universities, teachers' colleges, and normal schools, as well as accredited library schools, if the demand for expert school librarianship is to be met. Standard library science curricula suited to various types of institutions have been adopted by the American Library Association. Every teacher-training agency now offering courses in library science or purposing to offer them in the future will find help and expert guidance in these Standards, which may be had on request from—The American Library Association, 86 East Randolph Street, Chicago, Illinois.

The Library in North Central Association High Schools

Report of the Association's Special Committee on Libraries

EDWIN L. MILLER, CHAIRMAN

Purpose: To secure information regarding the status of the school library in the high schools of the North Central Association.

Method: The basic data were collected by means of the School Library Score Card, which was prepared by a committee of the American Library Association and revised especially for this survey. The score card included 59 items, on each of which the school was to be rated some figure between 0 and the standard for the item. The standard varied from $\frac{1}{2}$ on items of little importance, to 5 on items of great importance. If the library were standard in all items, its score would be 100. A copy of the score card, together with a folder of directions and explanations, was sent to every high school in the Association. Returns were received from 1,115 schools, which was 53 per cent of the members. These schools were then classified by enrollment into five groups of different size. All tabulations and analyses were made on these five groups separately.

Two forms of expression of the results have been used. In Tables III, IV, and V, the median is presented for each library characteristic and for each subdivision of the score card. In Tables VI, VII, VIII, IX, X, and XI, which contain the detailed score card, the figure presented for each item is the percentage

of schools which are judged to be standard in that item.

FACTS AND INTERPRETATIONS

1. F. The average score on nearly every item increases regularly from small to large schools, but there is always considerable overlapping between the distributions.

I. Caution should be exercised in judging a school library solely with reference to the enrollment of the school.

2. F. The median number of volumes increases from 1,732 for small schools to 8,375 for large schools. (Table III).

I.

3. F. The median number of volumes per pupil decreases from 11 for small schools to 3 for large schools. (Table III).

I. Large schools can provide a much wider selection of titles at a lower cost per pupil.

4. F. The median number of pupils per library seat increases from 5 for small schools to 26 for large schools. (Table III).

I. Either the small schools are very wasteful of library space or the large schools are over-economical.

5. F. The median total score on the library score card ranges from 70 in small schools to 83 in large schools. (Table IV).

I. No schools meet the standard completely, but large schools approximate it more nearly than small schools. The average is less than 80 per cent of the standard.

6. F. Extra-curricular use and Supplementary Rooms are the two characteristics in which the average school is lowest with reference to the standard. (Table V).

I. Granting that the standard is

sound, schools generally need to improve their libraries in these regards.

7. F. Individual schools differ greatly in the particular characteristics of their libraries which lower their total score. (Tables V through XI).

I. Probably the greatest value of the survey will be the opportunity afforded principals of diagnosing and remedying the weaknesses of their own school libraries by comparison with the average for schools of their own size.

Table I. Number of Schools Reporting by States

State	High School Enrollment					Total Usable Records	Total Not Usable	Total Records Received	Total N. C. A. Members
	Below 250	250 to 499	500 to 999	1,000 to 1,999	2,000 Up				
Arizona	12	6	2	1	0	21	0	21	35
Arkansas	17	5	1	2	0	25	1	26	52
Colorado	20	10	6	5	0	41	2	43	88
Illinois	50	34	32	13	14	143	9	152	297
Indiana	12	18	20	10	2	62	4	66	96
Iowa	18	10	12	8	0	48	6	54	135
Kansas	42	18	13	3	1	77	2	79	135
Michigan	18	26	25	14	10	93	7	100	165
Minnesota	13	17	11	4	4	49	2	51	90
Missouri	29	17	7	6	4	63	2	65	117
Montana	8	4	3	0	0	15	0	15	40
Nebraska	24	5	3	2	2	36	6	42	110
New Mexico	14	2	1	0	0	17	0	17	31
North Dakota	20	2	1	0	0	23	1	24	73
Ohio	51	38	29	19	8	145	13	158	274
Oklahoma	20	15	1	3	1	40	2	42	107
South Dakota	21	6	2	1	0	30	1	31	59
West Virginia	18	8	7	3	0	36	0	36	51
Wisconsin	20	31	12	12	1	76	4	80	110
Wyoming	7	2	4	0	0	13	0	13	27
Total	434	274	192	106	47	1,053	62	1,115	2,092

Table II. Proportion of Member Schools of Various Sizes Reporting from Three States

	High School Enrollment				
	Below 250	250 to 499	500 to 999	1,000 to 1,999	2,000 Up
COLORADO					
N. C. A. Members	55	18	11	5	0
Schools Reporting	20	10	6	5	0
Percentage	36	56	55	100	0
INDIANA					
N. C. A. Members	26	32	24	11	3
Schools Reporting	12	18	19	10	2
Percentage	46	56	79	91	67
OKLAHOMA					
N. C. A. Members	61	31	8	5	1
Schools Reporting	20	15	1	3	1
Percentage	33	48	12	60	100

Table III. Library Characteristics of the Average School

	High School Enrollment				
	Below 250	250 to 499	500 to 999	1,000 to 1,999	2,000 Up
Median number of librarians.....	1.2	1.1	1.1	1.4	2.1
Median number of volumes.....	1732.0	2277.0	3362.0	5700.0	8375.0
Median seating capacity.....	30.3	42.5	60.5	85.6	107.0
Median number of volumes per pupil.....	10.9	6.7	5.4	4.3	2.7
Median number of volumes per seat.....	67.8	66.6	60.7	61.6	74.3
Median number of pupils per seat.....	5.4	9.3	11.4	18.8	26.0

Table IV. Total Score on School Library as Judged by Officers of the School

Score	High School Enrollment				
	Below 250	250 to 499	500 to 999	1,000 to 1,999	2,000 Up
100.....	---	---	---	---	---
95-99.....	5	---	6	6	3
90-94.....	22	18	22	28	3
85-89.....	26	28	39	18	14
80-84.....	63	44	45	18	10
75-79.....	49	44	39	16	7
70-74.....	60	42	15	9	6
65-69.....	41	23	14	7	2
60-64.....	37	25	12	---	1
55-59.....	31	16	---	2	---

Table IV—Continued

Score	High School Enrollment					All Schools
	Below 250	250 to 499	500 to 999	1,000 to 1,999	2,000 Up	
50-54.....	22	7	....	1	....	30
45-49.....	18	6	....	....	....	24
40-44.....	13	2	....	1	1	17
35-39.....	16	8	....	....	....	24
30-34.....	17	6	....	....	....	23
25-29.....	5	3	....	....	....	8
20-24.....	6	1	....	....	....	7
15-19.....	1	1	....	....	....	2
10-14.....	2	....	....	....	....	2
5- 9.....	....	....	....	....	....	....
0- 4.....	....	....	....	....	....	....
TOTAL.....	434	274	192	106	47	1,053
MEDIAN.....	70.1	74.3	81.1	84.2	82.8	78.0

Table V. Median Score on Subdivisions of Score Card

Item	Subject	Stand- ard	High School Enrollment					All Schools
			Below 250	250 to 499	500 to 999	1,000 to 1,999	2,000 Up	
1.	Amount of Service	5	4.2	4.7	4.9	5.0	5.0	.....
2- 8	Qualifications	10	6.4	7.1	8.0	8.2	8.3	.....
9-12	Status	5	3.6	3.8	4.0	3.8	3.9	.....
13-24	Duties	10	6.7	7.5	7.9	9.0	8.7	.....
25-28	Service to Pupils	8	6.4	6.2	5.5	6.6	6.7	.....
29-30	Service to Teachers	8	5.8	6.5	7.7	7.8	7.8	.....
31-33	Extra-Curricular Use	4	1.0	1.4	1.7	2.0	2.2	.....
34	Number of Suitable Books.....	4	3.8	3.6	3.4	2.8	2.1	.....
35	Annual Acquisitions	2	2.0	2.1	2.0	1.9	2.0	.....
36	Subject Range of the Book Collection..	4	3.9	4.0	4.0	4.0	4.0	.....
37	Periodicals	2	1.2	1.8	1.8	1.9	1.9	.....
38	Other Forms of Material.....	2	0.6	0.8	1.7	1.8	1.9	.....
39-40	Book Selection Policy.....	6	5.6	5.7	5.9	5.9	6.0	.....
41	Appropriation	3	2.8	2.8	2.8	2.7	2.8	.....
42-46	Division of Appropriation.....	8	4.9	5.6	6.2	6.2	6.0	.....
47	School Control and Administration.....	4	2.8	3.4	3.8	3.8	3.8	.....
48	Location	3	3.0	2.8	2.9	2.9	2.9	.....
49-50	Size	4	3.7	3.6	3.5	2.8	2.1	.....
51-54	Equipment	2	1.2	1.3	1.0	1.6	1.7	.....
55-57	Furniture	5	4.6	4.7	4.9	4.9	4.9	.....
58-59	Supplementary Rooms	1	0.1	0.1	0.1	0.2	0.2	.....

Table VI. Percentage of Schools Judged by Their Own Officers to Be Standard in Amount of Service, and in Qualifications and Status of the Librarian

	High School Enrollment					All Schools
	Below 250	250 to 499	500 to 999	1,000 to 1,999	2,000 Up	
AMOUNT OF SERVICE						
1. If the librarian and assistants give service in the library the full teaching day.....	45	61	87	95	96	61
QUALIFICATIONS						
2. Personnel Relations. If the librarian co-operates in school policies and objectives.....	87	95	97	100	100	93
3. Intellectual Interests. If she demonstrates wide knowledge of books and sources of material of tangible value to the school.....	52	62	78	85	96	65
4. Organizing Ability. If the material in the library is well balanced, well arranged, and easily accessible	65	68	80	85	89	71
5. Education and Professional Library Training. If the librarian has a college or university degree.....	63	60	63	63	81	64
6. If a library school certificate, or a library degree....	13	21	42	62	51	27
7. Experience. If she had had successful public library experience in reference work with young people.....	36	43	62	71	75	48
8. Certification. If she has a state library certificate or endorsement	13	28	38	45	40	26
STATUS						
9. If the librarian has the same status in the school as the teachers of equal preparation and responsibility....	70	73	87	86	83	76
10. If the librarian's salary is on the same schedule as the teachers'	54	61	71	60	64	60
11. For equal vacation allowance.....	65	75	85	76	85	74
12. For full time trained assistant for every 1,000 pupils enrolled	22	24	35	39	36	27

Table VII. Percentage of Schools Judged by Their Own Officers to Be Standard in Duties of the Librarian

	High School Enrollment					All Schools
	Below 250	250 to 499	500 to 999	1,000 to 1,999	2,000 Up	
DUTIES						
13. If the librarian directs the reference work of the pupils	65	76	87	92	98	76
14. If the librarian guides and provides aids for the recreational (non-required) reading of the pupils....	56	64	76	88	92	67

Table VII—Continued

	High School Enrollment					All Schools
	Below 250	250 to 499	500 to 999	1,000 to 1,999	2,000 Up	
15. If she gives regular instruction in the use of books and the library	37	41	57	74	70	47
16. If she helps the teachers to find suitable material on special topics	76	83	94	98	94	84
17. If the librarian participates in planning the room and equipment	65	77	90	96	87	77
18. If she has built up or is building an effective working organization (see Directing the policy of the library)	63	76	84	93	94	75
19. If the library appropriation is divided to cover all needs	75	82	88	90	94	81
20. If she co-operates with other library organizations..	53	69	84	89	89	68
21. For adequate charging system to locate books when in circulation	92	96	98	99	98	95
22. For classification and cataloging adequate for speedy location of books or material	85	88	90	98	92	88
23. If books and material are in good condition and arrangement	92	95	96	98	96	94
24. If the librarian is not required to do clerical work..	38	48	58	67	72	48

Table VIII. Percentage of Schools Judged by Their Own Officers to Be Standard in Service Through Use of the Library

	High School Enrollment					All Schools
	Below 250	250 to 499	500 to 999	1,000 to 1,999	2,000 Up	
TO PUPILS						
25. If all pupils in the school use the library at some time	83	70	72	64	62	75
26. If the pupils seem happy in using the library.....	92	96	96	100	98	95
27. If pupils' reading record of recreational and non-required books is kept	29	26	31	25	26	28
28. If the library is open for recreational reading at the lunch hour	42	30	43	70	76	43
TO TEACHERS						
29. If the librarian has encouraged each teacher to stimulate her pupils to use the school and the public library	53	58	77	83	74	63
30. If the librarian has encouraged each teacher to use the library for personal reading, professional study or communication with the public library.....	43	49	66	77	70	53
EXTRA-CURRICULAR USE						
31. If exhibits showing the work of the library are held at the time of the general school exhibit.....	17	21	35	46	60	26
32. If exhibits showing the work of the library are held at the time of Parent-Teacher meetings.....	11	6	15	22	40	13
33. If the library is used as the center of school activities	35	38	45	60	49	41

Table IX. Percentage of Schools Judged by Their Own Officers to Be Standard in Service Through the Book Collection

	High School Enrollment					All Schools
	Below 250	250 to 499	500 to 999	1,000 to 1,999	2,000 Up	
34. If the number of suitable books averages six per pupil enrolled in the school.....	79	58	49	35	18	27
35. If new material, replacements, and duplicates, as needed, are added annually	89	89	91	90	93	87
36. If each school department is represented in the library	92	91	95	97	96	91
37. If there is a working collection of periodicals, including The Readers' Guide to periodical literature..	40	52	73	90	89	54
38. If there are files of clippings, bulletins, pictures, posters, etc.	26	31	65	74	78	39
39. If the book selection responsibility is given to the librarian, with the teachers' advice.....	60	60	79	93	94	68
40. If the standard of quality of the books is equivalent to that maintained in public libraries.....	87	86	98	95	100	90

Table X. Percentage of Schools Judged by Their Own Officers to Be Standard in Maintenance and Control

	High School Enrollment					All Schools
	Below 250	250 to 499	500 to 999	1,000 to 1,999	2,000 Up	
41. If library has a definite appropriation according to the standards	68	69	77	66	73	68
42. If library funds are distributed according to a budget plan	53	54	66	79	85	60
43. If salaries are on the same schedule as teachers.....	47	58	71	58	55	55
44. If books and periodical budget is according to standard	56	59	66	70	66	60
45. If there is a budget item for binding and supplies....	50	53	70	87	83	59
46. If contingent fund is provided.....	44	46	53	62	49	48
47. School or public library and school joint control. (a) If the library is wholly under the school and has a librarian with education equivalent to the teachers' besides professional library training, give full score, or (b) if the library is controlled jointly by the public library and the school, has a trained librarian with education equivalent to the teachers' and ability to adjust to the school situation, give full score	37	49	69	70	71	49

Table XI. Percentage of Schools Judged by Their Own Officers to Be Standard in Service Through Library Room and Equipment

	Below 250	High School 250 to 499	School 500 to 999	Enrollment 1,000 to 1,999	2,000 Up	All Schools
48. If the library is centrally located, near study hall but separate	71	69	78	81	89	71
49. If the library has seating capacity for ten to fifteen per cent of the daily school attendance.....	68	57	52	37	19	57
50. If the library has wall space for shelving six to ten books per pupil.....	90	79	68	60	38	78
51. If the library has adequate daylight, and semi-direct artificial lighting	90	92	92	93	92	91
52. If it has built-in wooden wall shelving of standard dimensions, without doors	65	67	82	88	95	72
53. If it has periodical shelving	68	70	78	85	85	72
54. If the floor is covered with battleship linoleum or other sound deadening material.....	15	17	34	52	55	25
55. If the room has at least chairs, tables, library desk, card catalog case	72	81	92	93	98	81
56. If the furniture is of standard size and type for library use	64	74	85	91	87	74
57. If the room is of inviting appearance.....	79	84	89	95	96	84
58. If the library has a connecting conference or class room with book shelving.....	14	16	21	34	34	9
59. For a work room with shelving, running water, outside ventilation	12	12	22	40	36	18

Table XII. Number of Librarians

	Below 250	High School 250 to 499	School 500 to 999	Enrollment 1,000 to 1,999	2,000 Up	All Schools	Detroit
10-Up	5	5	....	1	....	11	....
9.....	8	3	....	....	....	11	....
8.....	5	....	1	....	....	6	....
7.....	11	1	1	1	....	14	....
6.....	7	2	1	....	....	10	....
5.....	5	4	1	3	4	17	....
4.....	11	6	2	1	5	25	....
3.....	15	7	6	14	8	50	1
2.....	45	26	24	24	17	136	6
1.....	285	208	154	62	13	722	6
TOTAL.....	397	262	190	106	47	1,002	13
MEDIAN	1.2	1.1	1.1	1.4	2.1	1.2	2.1

Table XIII. Number of Volumes in the Library

	High School Enrollment					All Schools	Detroit
	Below 250	250 to 499	500 to 999	1,000 to 1,999	2,000 Up		
14,000-14,999.....	10	6	4	7	5	32	....
13,000-13,999.....	3	3	2	2	....	10	....
12,000-12,999.....	3	3	....	3	6	15	....
11,000-11,999.....	....	2	....	1	5	8	....
10,000-10,999.....	2	2	4	2	3	13	1
9,000- 9,999.....	4	1	3	4	2	14	....
8,000- 8,999.....	9	1	4	4	4	22	1
7,000- 7,999.....	3	8	6	13	3	33	....
6,000- 6,999.....	8	5	10	12	8	43	4
5,000- 5,999.....	7	10	20	13	5	55	2
4,000- 4,999.....	17	9	24	13	1	64	1
3,000- 3,999.....	34	35	29	17	4	119	2
2,000- 2,999.....	59	65	53	8	1	186	1
1,000- 1,999.....	185	94	28	3	....	310	1
0- 999.....	73	20	4	2	....	99	....
TOTAL.....	417	264	191	104	47	1,023	13
MEDIAN.....	1,732.0	2,277.0	3,362.0	5,700.0	8,375.0	2,551.0	5,750.0

Table XIV. Seating Capacity of the Library

	High School Enrollment					All Schools	Detroit
	Below 250	250 to 499	500 to 999	1,000 to 1,999	2,000 Up		
350-Up.....	....	....	1	....	1	2	....
325-349.....	....	....	....	....	2	2	....
300-324.....	1	3	....	....	....	4	....
275-299.....	1	....	1	....	2	4	....
250-274.....	1	1	1	1	....	4	....
225-249.....	1	....	....	2	....	3	....
200-224.....	8	5	1	1	1	16	....
175-199.....	4	2	2	2	2	12	....
150-174.....	4	7	8	5	4	28	1
125-149.....	8	9	6	10	3	36	1
100-124.....	23	20	20	18	12	93	4
75- 99.....	32	26	28	22	12	120	4
50- 74.....	48	29	44	31	8	160	2
25- 49.....	86	74	58	11	....	229	....
0- 24.....	177	76	17	....	....	270	1
TOTAL.....	394	252	187	103	47	983	13
MEDIAN.....	30.3	42.5	60.5	85.6	107.0	50.0	96.9

Table XV. Number of Volumes Per Pupil

	High School Enrollment					All Schools	Detroit
	Below 250	250 to 499	500 to 999	1,000 to 1,999	2,000 Up		
60-Up	37	---	1	---	---	38	---
56-59	3	---	---	---	---	3	---
52-55	7	---	---	---	---	7	---
48-51	4	1	---	---	---	5	---
44-47	2	2	---	---	---	4	---
40-43	7	3	1	---	---	11	---
36-39	6	3	---	---	---	9	---
32-35	4	1	2	1	---	8	---
28-31	5	4	1	---	---	10	---
24-27	9	7	---	---	---	16	1
20-23	18	4	3	1	---	26	---
16-19	30	5	2	---	---	37	---
12-15	49	19	6	2	---	76	---
8-11	110	43	25	6	---	184	---
4-7	113	117	75	44	12	361	---
0-3	16	49	73	49	33	220	12
TOTAL	420	258	189	103	45	1,015	13
MEDIAN	10.9	6.7	5.4	4.3	2.7	7.2	2.2

Table XVI. Number of Volumes Per Seat in the Library

	High School Enrollment					All Schools	Detroit
	Below 250	250 to 499	500 to 999	1,000 to 1,999	2,000 Up		
300-Up	26	8	1	5	---	40	---
280-299	2	1	---	---	---	3	---
260-279	4	2	2	---	---	8	---
240-259	3	8	2	1	1	15	---
220-239	7	3	---	---	---	10	---
200-219	11	7	3	2	---	23	---
180-199	10	8	2	2	1	23	---
160-179	12	6	5	2	3	28	---
140-159	13	10	9	1	2	35	---
120-139	14	9	11	5	---	39	1
100-119	33	13	11	5	4	66	---
80-99	28	22	18	11	9	88	2
60-79	38	35	28	19	7	127	2
40-59	48	35	36	34	8	161	5
20-39	60	42	37	11	9	159	3
0-19	63	32	17	5	---	117	---
TOTAL	372	241	182	103	44	942	13
MEDIAN	67.8	66.6	60.7	61.6	74.3	65.5	47.0

Table XVII. Number of Pupils Per Seat in the Library

	High School Enrollment					All Schools	Detroit
	Below 250	250 to 499	500 to 999	1,000 to 1,999	2,000 Up		
48-51	5	3	5	1	6	20	2
44-47 .....	....	1	2	1	1	5	....
40-43	1	1	1	....	3	6	....
36-39	2	1	2	3	1	9	1
32-35	1	2	1	6	5	15	....
28-31	2	5	2	5	6	20	2
24-27	3	6	3	14	3	29	1
20-23	9	11	13	17	10	60	1
16-19	8	27	25	19	5	84	3
12-15	29	29	30	24	1	113	2
8-11	66	53	49	8	4	180	....
4- 7	94	50	41	5	2	192	1
0- 3	156	55	8	2	....	221	....
TOTAL	376	244	182	105	47	954	13
MEDIAN	5.4	9.3	11.4	18.8	26.0	9.4	22.0

Table XVIII. Basic Distribution of Scores

		High School Enrollment							High School Enrollment				
No. of Item	Score	Below 250	250 to 499	500 to 999	1,000 to 1,999	2,000 Up	No. of Item	Score	Below 250	250 to 499	500 to 999	1,000 to 1,999	2,000 Up
No. Reporting		434	274	192	106	47	No. Reporting		434	274	192	106	47
1	0	35	13	1	....	....	9	0	91	44	13	7	3
	1	29	9	0	....	....		1	37	30	12	8	5
	2	48	25	3	....	....		2	304	196	165	89	39
	3	63	36	4	....	1	10	0	198	106	55	42	17
	4	63	27	1	5	1		1	234	164	135	62	30
5	194	172	130	101	43	11	0	151	68	29	25	7	
2	0	57	13	6	0		0	1	281	202	161	79	40
	1	375	257	184	104	47	12	0	339	206	124	63	30
3	0	58	17	7	1	....		1	93	64	66	41	17
	1	151	86	34	15	2	13	0	152	65	25	7	1
2	223	167	149	88	45	½		280	205	165	97	46	
4	0	19	6	3	....	....	14	0	189	98	45	12	4
	1	22	14	5	....	....		1	243	172	145	92	43
	2	109	66	31	16	5	15	0	273	160	82	27	14
3	282	184	151	88	42	1		159	110	108	77	33	
5	0	160	107	71	38	9	16	0	102	45	11	2	3
	1	272	163	119	66	38		½	330	225	179	102	44
6	0	375	212	110	40	23	17	0	150	62	20	4	6
	1	57	58	80	64	24		1	282	208	170	100	41
7	0	277	153	73	30	12	18	0	160	65	30	7	3
	1	155	117	117	74	35		1	272	205	160	97	44
8	0	374	194	117	57	28		0	160	65	30	7	3
	1	58	76	73	47	19		1	272	205	160	97	44

No. of Item	Score	High School Enrollment				
		Below 250	250 to 499	500 to 999	1,000 to 1,999	2,000 Up
No. Reporting		434	274	192	106	47
19	0	109	50	24	10	3
	½	323	220	166	94	44
20	0	204	84	30	11	5
	½	227	186	160	93	42
21	0	35	12	4	1	1
	½	398	258	186	103	46
22	0	64	34	20	2	4
	1	368	236	170	102	43
23	0	34	14	7	2	2
	½	398	256	183	102	45
24	0	207	92	49	17	9
	1	61	49	32	17	4
	2	163	129	109	70	34
25	0	9	5	4	2	2
	1	1	0	0	0	0
	2	10	3	3	5	2
	3	19	28	22	9	4
	4	35	44	25	21	10
	5	358	190	136	67	29
26	0	34	12	8	0	1
	1	398	258	182	104	46
27	0	305	201	131	78	35
	1	127	69	59	26	12
28	0	252	190	109	31	11
	1	180	80	81	73	36
29	0	79	23	9	3	1
	1	9	8	1	0	0
	2	62	43	14	11	2
	3	53	39	19	4	9
	4	229	157	147	86	35
30	0	117	46	18	4	1
	1	22	15	2	2	2
	2	67	45	18	11	2
	3	42	31	27	7	9
	4	184	133	125	80	33
31	0	359	213	124	56	19
	1	73	57	66	48	28
32	0	383	243	161	81	28
	1	49	17	29	23	19
33	0	220	113	71	29	14
	1	61	53	33	13	10
	2	151	104	86	62	23
34	0	24	24	13	15	6
	1	7	4	10	7	9
	2	33	44	25	25	14
	3	37	53	29	22	9
	4	341	164	73	37	8

No. of Item	Score	High School Enrollment				
		Below 250	250 to 499	500 to 999	1,000 to 1,999	2,000 Up
No. Reporting		434	274	192	106	47
35	0	8	4	2	1	0
	1	38	28	12	10	3
	2	386	252	136	95	42
36	0	2	0	0	0	0
	1	3	2	0	0	0
	2	14	6	4	2	0
	3	28	18	4	1	2
	4	400	260	142	103	43
37	0	110	58	18	2	1
	1	150	78	23	9	4
	2	172	148	109	95	40
38	0	209	121	30	13	2
	1	109	74	22	15	8
	2	114	87	98	78	35
39	0	83	43	12	0	1
	1	27	15	6	3	2
	2	64	51	22	4	0
	3	258	161	150	97	44
40	0	18	7	1	2	0
	1	6	6	2	0	0
	2	33	26	1	3	0
	3	375	231	186	99	47
41	0	63	34	13	8	3
	1	18	15	3	6	2
	2	56	39	18	22	7
	3	295	195	116	70	33
42	0	151	86	45	12	4
	1	51	38	19	10	3
	2	230	146	126	82	40
43	0	212	101	50	38	17
	1	18	13	5	6	4
	2	202	156	135	60	26
44	0	120	61	38	12	5
	1	66	49	27	19	11
	2	244	160	125	73	31
45	0	216	126	58	14	8
	1	216	144	132	90	39
46	0	243	146	90	39	24
	1	189	124	100	65	23
47	0	103	45	11	6	1
	1	14	6	3	0	0
	2	76	53	16	11	4
	3	84	42	17	15	8
	4	161	140	103	74	32
48	0	50	36	4	3	1
	1	21	17	6	7	0
	2	55	37	22	10	4
	3	306	196	118	86	40

		High School Enrollment				
No. of		250	500	1,000	2,000	
Item	Score	to	to	to	Up	
		250	499	1,999		
No. Reporting		434	274	192	106	
					47	

49	0	92	54	45	20	22
	1	44	62	46	45	16
	2	296	154	99	39	9
50	0	19	23	21	12	16
	1	26	33	40	30	13
	2	387	214	129	62	18
51	0	43	23	15	7	4
	$\frac{1}{2}$	389	247	175	97	43
52	0	152	88	34	12	2
	$\frac{1}{2}$	280	182	156	92	45
53	0	139	82	42	16	7
	$\frac{1}{2}$	293	188	148	88	40
54	0	366	223	126	50	21
	$\frac{1}{2}$	66	47	64	54	26

		High School Enrollment				
No. of Item	Score	250	500	1,000	2,000	
		to 250	to 499	to 999	to 1,999	Up
No. Reporting		434	274	192	106	47

55	0	27	8	4	1	0
	1	32	12	4	0	0
	2	61	32	7	6	1
	3	312	218	175	97	46
56	0	153	69	29	9	6
	1	279	201	161	95	41
57	0	90	43	21	5	2
	1	342	227	169	99	45
58	0	372	226	150	69	31
	$\frac{1}{2}$	60	44	40	35	16
59	0	379	238	148	62	30
	$\frac{1}{2}$	53	32	42	42	17

The Library Score Card

Copies of the Library Score Card mentioned in this report and explanatory matter relating to it may be secured from the office of the American Library Association, 86 East Randolph St., Chicago. Single copies sell for 25 cents. Special rates for quantities may be secured on application.

Table XIX. Summary of Information About Schools Which Reported

Name of School	Enrollment	Volumes in Library	Library Seating Capacity	Volumes per Pupil	Volumes per Seat	Pupils per Seat	Total Score
ARIZONA							
Ajo	75	3,500	50	46.6	70.	1.5	73.5
Duncan	100	700	25	7.0	28.0	4.0	65.5
Flagstaff	150	1,025	28	6.8	36.6	5.4	68.5
Holbrook	51	1,050	20	20.6	52.5	2.5	79.
Marana	47	300	10	6.4	30.0	4.7	39.
Nogales	221	2,000	200	9.1	10.0	2.2	81.
Peoria	96	1,042	78	10.9	13.1	1.2	85.
Ray	73	1,027	15	14.0	68.3	4.8	76.
Scottsdale	80	1,375	60	17.2	22.9	1.3	83.
Tempe	175	1,800	24	10.3	75.0	7.3	69.5
Thatcher	94	4,000	150	42.6	26.7	0.6	83.
Winslow	140	3,500	140	25.0	25.0	1.0	87.
Bisbee	373	2,518	10	6.7	251.8	37.8	80.5
Douglas	398	.....	24	.....	.....	16.5	75.5
Globe	305	2,500	80	8.2	31.2	3.8	86.
Jerome	257	2,753	70	10.7	39.3	3.6	75.5
Prescott	275	2,250	.....	8.1	.....	.....	31.
Yuma	400	2,250	12	5.6	189.2	33.3	86.
Mesa	675	4,000	85	5.9	47.0	7.9	86.
Miami	572	.....	42	.....	.....	13.6	62.
Tucson	1,116	4,000	100	3.5	40.0	11.2	88.5
ARKANSAS							
Augusta	110	900	0	8.2	.....	.....	53.5
Brinkley	184	1,750	100	9.5	17.5	1.8	85.
Clarksville	60	8,500	60	141.6	141.6	1.0	93.
Clarendon	147	1,000	0	6.8	.....	.....	62.5
Crossett	83	1,375	52	16.6	26.4	1.6	86.
Crawfordsville	26	1,322	10	50.8	132.2	2.6	71.
Dermott	210	1,050	50	5.0	21.0	4.2	82.5
Earle	120	700	40	5.8	17.5	3.0	80.
Helena	225	2,655	10	11.8	265.5	22.5	59
Hulbert	27	700	25	26.0	28.0	1.1	84.
Lonoke	86	1,200	40	14.0	30.0	2.2	58.
Magnolia	129	1,000	18	7.7	55.5	7.2	77.5
Monticello	181	1,200	20	6.6	60.0	9.0	75.5
Prescott	247	1,500	20	6.1	75.0	12.3	51.
Rogers	240	3,250	25	13.5	130.0	9.6	51.5
Silvan Springs	190	2,000	15	10.5	133.0	12.7	46.5
Wynne	140	1,059	10	7.6	105.9	14.0	57.
Camden	431	1,315	13	30.5	101.1	33.1	50.5
El Dorado	401	1,621	45	4.0	36.0	8.9	77.
Magnolia	317	3,000	60	9.4	50.0	5.2	70.5
Monticello	327	3,850	250	11.7	15.4	1.3	87.
Stuttgart	280	2,800	15	10.0	186.6	18.6	65.5

Table XIX—Continued

Name of School	Enrollment	Volumes in Library	Library Seating Capacity	Volumes per Pupil	Volumes per Seat	Pupils per Seat	Total Score
Paragould	548	2,463	121	4.6	20.4	4.5	77.5
Hot Springs	1,272	2,500	60	2.0	41.6	21.2	70.5
Little Rock	1,657	10,721	125	6.5	85.6	13.3	90.
COLORADO							
Aurora	90	947	20	10.5	47.3	4.5	49.5
Douglas County	126	1,476	.....	11.7	.....	.....	39.5
Center	105	1,113	5	10.6	222.6	21.0	49.5
Crowley	60	.....	6	.....	.....	10.0	67.
Del Norte	152	1,660	6	10.9	276.6	25.3	78.5
Denver :							
Opportunity	225	1,953	28	70.2	8.0	8.7	88.5
Regis	160	25,000	48	156.5	520.1	3.3	91.
Fowler	171	2,000	30	11.7	66.6	5.7	64.
Fruita	225	726	.....	3.2	.....	.....	26.5
Golden	205	3,000	90	14.8	33.5	2.6	38.5
Hayden	131	9,750	110	74.5	86.5	1.2	47.5
Holly	122	2,937	8	24.1	367.1	15.2	81.5
Hugo	148	2,000	32	13.5	68.4	4.6	39.5
Johnstown	187	1,564	.....	8.4	.....	.....	64.
Mount Vista :							
Rio Grande	160	1,185	104	7.4	11.4	1.5	60.5
Sargent	94	.....	40	.....	.....	2.3	27.5
Palisade	69	1,150	120	12.9	9.6	7.4	49.5
Paonia	164	1,500	10	9.1	150.0	16.4	37.
Silverton	40	800	50	20.0	16.0	0.8	54.5
Yuma	208	825	25	3.9	33.0	8.3	78.5
Durango	380	1,500	50	3.9	30.	7.6	63.
Florence	361	1,500	15	4.1	10.0	24.0	68.
Holyoke	325	3,250	80	10.0	40.8	4.1	69.5
La Junta	416	2,315	50	5.5	46.3	8.3	37.5
Lamar	400	4,075	80	10.1	50.9	5.	88.
Las Animas	250	2,200	20	8.8	110.	12.5	61.
Leadville	279	3,000	108	10.7	27.7	2.5	85.5
Longmont	307	1,250	108	4.0	11.5	2.8	65.
Montrose	385	1,943	8	5.0	242.7	48.1	62.5
Walsenburg	300	575	80	1.9	7.1	3.6	61.5
Boulder	700	6,780	60	9.7	113.0	11.6	77.5
Denver	620	3,589	152	5.8	23.6	4.1	94.5
Greeley	581	2,066	120	3.6	17.3	4.8	83.
Rocky Ford	565	4,250	30	7.5	141.7	18.8	85.5
Sterling	531	4,000	25	7.5	160.0	21.2	78.5
Trinidad	775	1,500	110	1.9	13.6	7.0	75.5
Colorado Springs.....	1,059	6,354	128	6.0	50.0	8.3	91.
Denver :							
East High	1,906	8,200	192	4.3	42.6	9.9	83.5

Table XIX—Continued

Name of School	Enrollment	Volumes in Library	Library Seating Capacity	Volumes per Pupil	Volumes per Seat	Pupils per Seat	Total Score
South High	1,090	4,700	228	4.5	20.6	4.8	88.
West High	1,250	7,400	100	5.9	74.0	12.5	93.
Pueblo	1,050	950	115	0.9	8.3	9.1	59.5
ILLINOIS							
Augusta	126	1,020	146	8.1	7.0	0.86	81.5
Blandinsville	132	2,075	10	15.7	207.5	13.2	44.5
Charlestown	231	32,212	91	139.0	354.0	2.5	90.
Chicago:							
H. Family of—							
Nazareth	216	8,250	42	38.1	196.5	5.1	95.5
Josephium	150	3,255	50	21.7	65.1	3.0	77.5
Morgan Park Ac... ..	215	950	40	4.4	23.8	5.4	23.5
N. Park College....	175	6,324	102	35.2	62.0	1.7	80.5
St. Francis							
Xavier Academy	200	9,000	40	45.0	225.0	5.0	84.5
Dwight	228	1,350	24	5.9	56.1	9.5	63.5
Elgin	82	3,500	30	42.7	116.6	2.7	67.
El Paso	180	1,480	20	8.2	74.0	9.0	73.
Fairbury	197	2,380	20	12.1	119.0	9.8	82.5
Fulton	98	675	.....	6.9	.....	.....	63.
Galva	178	3,646	.....	20.5	.....	.....	31.5
Geneva	203	2,084	24	10.3	86.6	8.5	71.
Griggsville	134	676	14	5.1	48.3	9.5	57.5
Gurnee	220	2,160	32	9.8	67.5	6.9	77.
La Grange	141	12,824	50	91.0	256.5	2.8	86.
Lake Forest	100	7,000	35	70.0	200.0	2.8	78.5
Lebanon	137	874	12	6.4	73.0	11.4	50.5
Lexington	132	1,050	10	8.0	105.0	13.2	73.
Lisle	158	23,000	10	145.5	2300.0	15.8	67.5
Lovington	135	2,300	6	17.0	386.6	22.5	53.
Mahomet	82	900	0	11.0	.....	.....	.....
Marengo	200	2,500	24	12.5	104.0	8.3	66.5
Mason	160	650	200	4.0	3.2	0.8	56.
McLean	81	650	85	8.0	7.6	.95	52.
Mendon	119	2,075	0	17.4	.....	.....	74.5
Monticello	223	1,175	25	5.3	47.0	9.0	71.5
Mt. Olive	164	.....	12	.....	.....	13.7	59.
Neoga	150	.....	20	.....	.....	7.5	72.5
Newton	210	800	20	3.8	40.0	10.5	55.
Normal	230	2,800	35	12.1	80.0	6.6	61.5
Polo	198	1,365	15	6.9	91.0	13.2	70.5
Rochelle	240	1,385	30	5.8	46.2	8.0	83.
Rock Falls	213	1,230	12	5.8	102.5	17.8	65.
Rock Island	71	4,000	100	56.3	40.0	.7	90.5
St. Charles	246	2,094	40	8.5	52.3	6.1	65.5
Sparta	247	1,150	276	4.5	4.2	.9	66.
Stonington	119	340	.....	2.8	.....	.....	63.5
Villa Grove	196	1,000	50	5.0	20.0	4.0	73.5

Table XIX—Continued

Name of School	Enrollment	Volumes in Library	Library Seating Capacity	Volumes per Pupil	Volumes per Seat	Pupils per Seat	Total Score
Walnut	119	552	72	4.6	7.6	1.6	36.
Washburn	99	1,125	.....	11.4	.....	.....	54.5
Waverly	175	1,600	25	9.1	64.0	7.0	77.5
Wellington	34	780	10	22.9	78.0	3.4	32.
West Chicago	190	1,600	36	8.4	44.5	5.3	85.
Wheaton	100	898	30	9.0	30.0	3.3	70.
Williamsville	92	1,000	12	10.8	83.2	7.7	55.5
Yorkville	114	1,163	12	10.2	96.7	9.5	51.5
Belvidere	422	2,308	24	5.4	96.1	17.5	80.5
Bridgeport	401	3,250	45	8.1	72.2	8.9	82.5
Casey	368	1,800	15	4.8	120.0	24.5	56.
Charleston	320	500	30	1.5	16.6	10.6	72.
Chicago:							
Acad. of our Lady	350	10,000	324	28.5	30.8	1.1	89.
Aquinas	265	1,035	6	3.9	172.5	44.1	70.
Central Y. M. C. A.	298	6,500	24	21.8	270.8	12.4	76.5
Flower Technical	416	1,500	0	3.6	.....	.....	50.5
Loyola Academy....	399	15,000	140	37.5	107.1	2.8	90.
Pullman Free							
School of Manual							
Training	400	3,300	75	8.2	44.0	5.3	87.
St. Rita	325	2,500	50	7.6	50.0	6.5	84.5
St. Stanislaus	382	5,650	60	14.7	94.1	6.3	78.
Visitation	485	3,000	50	6.1	60.0	9.7	82.5
Clinton	430	16,000	60	37.2	268.0	7.2	82.5
Crystal Lake	277	2,678	128	9.6	20.9	2.1	71.5
Downers Grove	319	800	158	2.5	5.1	2.01	48.5
Dundee	256	1,051	14	4.1	75.1	18.2	37.
Eldorado	412	2,911	16	7.1	181.9	25.7	62.5
Flora	250	1,350	.....	5.4	.....	.....	28.
Geneseo	288	1,949	15	6.7	129.9	19.2	57.
Hinsdale	365	2,106	87	5.7	24.2	4.1	86.5
Jerseyville	278	1,939	.....	6.9	.....	.....	56.5
Johnstown City	346	3,500	40	10.1	87.5	8.6	56.5
Libertyville	260	1,500	75	5.7	20.	3.4	57.
Lockport	254	2,385	36	9.3	78.7	7.1	77.5
Mendota	275	800	12	2.9	66.6	22.9	27.5
Moosheart	300	3,000	40	10.	75.0	7.5	93.5
Morris	263	7,228	50	27.4	144.5	5.2	75.
Normal	250	51,030	200	204.1	255.1	1.2	82.5
Pontiac	389	20,016	30	51.4	667.2	12.9	74.5
Riverside	491	3,500	24	7.1	145.8	20.4	61.
Savanna	265	1,612	16	6.1	100.7	16.5	80.5
Sullivan	274	2,000	15	7.2	133.3	18.2	43.5
Wood River	366	1,205	27	3.2	44.6	13.5	71.
Aurora:							
East High	969	3,500	42	3.6	83.4	23.1	79.
West High	572	2,800	36	4.9	77.9	15.9	79.5

Table XIX—Continued

Name of School	Enrollment	Volumes in Library	Library Seating Capacity	Volumes per Pupil	Volumes per Seat	Pupils per Seat	Total Score
Belleville	860	5,150	140	6.0	36.8	6.1	98.
Canton	790	1,714	33	2.2	51.5	23.7	54.
Centralia	749	3,500	68	4.7	51.5	11.0	81.5
Chicago:							
Central Y. M. C. A.	970	6,500	40	6.7	162.5	24.2	78.
De LaSalle Inst.....	565	13,000	76	23.0	171.0	67.4	77.5
Mt. Carmel	630	7,140	84	11.3	85.0	7.5	84.
St. Ignatius	540	40,000	150	74.1	266.0	3.6	85.
University	570	10,500	168	18.4	62.5	3.4	91.5
Chicago Heights	896	6,500	90	7.2	72.2	10.0	85.5
De Kalb	600	2,500	60	4.2	41.6	10.0	84.5
Des Plaines	650	2,500	100	3.8	25.0	6.5	78.5
Freeport	780	9,906	80	12.7	123.8	9.7	93.5
Glen Ellyn	562	1,600	100	2.8	16.0	5.6	71.5
Granite City	680	2,250	50	3.3	45.0	13.6	83.5
Harrisburg	798	2,316	44	2.9	52.5	18.2	61.5
Highland Park.....	965	5,650	116	5.8	48.7	8.3	89.5
Kewanee	530	1,751	.....	3.3	.....	.....	61.
La Salle	731	6,916	55	9.5	125.7	13.3	91.5
Marion	637	1,600	75	2.5	21.3	8.5	76.
Monmouth	621	2,317	38	3.7	60.9	16.3	75.
Naperville	550	4,896	.....	8.9	.....	.....	41.
Ottawa	512	2,666	46	5.2	57.8	11.1	81.
Paris	625	3,140	32	5.0	98.0	19.5	63.5
Pekin	652	3,172	60	4.8	52.9	10.9	83.
Quincy	705	2,000	60	2.8	33.3	11.8	88.
Rock Island	828	6,075	42	7.3	144.5	19.7	87.5
Sterling	558	1,500	25	2.7	60.0	22.3	75.5
Streator	686	2,000	80	2.9	25.0	8.6	73.5
West Frankfort.....	809	4,060	100	5.0	40.6	8.1	83.
Bloomington	1,075	3,000	40	2.8	75.0	26.9	66.
Champaign	1,046	6,240	30	6.0	208.0	34.9	70.
Danville	1,557	1,332	90	0.85	14.8	17.3	82.5
Decatur	1,361	7,533	97	5.6	77.6	14.0	80.
Elgin	1,232	7,700	62	6.2	124.0	20.0	91.5
Harvey	1,050	6,000	86	5.7	69.8	12.2	83.
Joliet	1,997	7,935	85	4.0	93.4	23.5	75.
La Grange	1,087	.....	110	.....	.....	9.9	95.
Maywood	1,700	7,522	116	4.4	65.0	14.6	92.
Moline	1,300	6,615	60	5.1	110.3	21.6	79.
Peoria	1,064	5,456	60	5.1	91.0	18.0	43.5
Waukegan	1,572	6,909	150	4.4	46.0	10.5	86.
Winnetka	1,665	9,500	157	5.7	60.5	10.6	84.5
Chicago:							
Austin High.....	3,800	11,500	60	3.0	191.7	63.3	79.5
Bowen High	2,550	4,000	80	1.6	50.0	31.9	79.5
Calumet High	2,260	3,114	72	1.4	43.3	31.4	80.
Englewood High.....	3,669	10,383	90	2.8	115.5	40.7	73.5

Table XIX—Continued

Name of School	Enrollment	Volumes in Library	Library Seating Capacity	Volumes per Pupil	Volumes per Seat	Pupils per Seat	Total Score
Harrison Technical	4,721	8,970	110	1.9	81.5	43.0	79.5
Lane Technical	4,481	5,326	60	1.2	88.9	73.6	71.5
Nicholas	3,619	11,778	75	3.3	157.0	48.2	78.5
Robert Lindblom	4,700	9,300	100	2.0	93.0	47.0	82.
Roosevelt	3,630	3,200	110	.88	29.1	33.0	85.5
Tilden Tech.	3,412	.....	156	.....	.....	21.8	85.5
Cicero	3,527	7,327	360	2.1	20.3	9.8	96.
Oak Park	2,827	12,000	160	4.2	75.0	17.7	95.
Rockford	2,000	7,000	72	3.5	97.1	27.8	89.5
Springfield	2,480	12,017	75	4.8	160.0	33.0	71.5
INDIANA							
Brooksville	170	1,113	185	6.6	6.0	0.92	91.5
Collegeville	212	17,000	72	80.0	236.0	2.9	92.5
Howe	175	4,000	20	22.8	200.0	8.7	71.5
Liberty	143	550	30	3.8	18.3	4.7	32.
Madison	243	1,500	114	6.2	13.2	2.1	32.5
North Judson	122	1,820	10	14.9	182.0	12.2	57.
North Manchester	150	1,364	75	9.1	18.2	2.0	77.5
Notre Dame	118	2,559	61	21.7	42.0	1.9	85.
Pierceton	119	1,027	25	8.6	41.0	4.8	80.5
Rusksville	238	965	0	4.1	.....	.....	45.5
Union City	142	2,700	18	19.0	150.0	7.9	81.5
Winchester	182	3,700	10	20.4	370.0	18.2	84.5
Alexandria	273	1,095	24	4.0	45.6	11.4	38.
Attica	403	2,258	138	5.6	16.3	2.9	67.
Auburn	315	1,251	315	3.9	3.9	1.	81.5
Brazil	395	3,375	45	8.5	75.0	8.7	86.5
Connersville	475	2,410	200	5.1	12.1	2.3	72.5
Fairmount	350	2,900	150	8.2	19.3	2.3	85.
Garrett	304	1,200	.....	3.9	.....	.....	72.5
Greencastle	361	1,532	148	4.2	9.2	2.4	64.
Greenfield	313	740	15	2.4	49.4	20.8	45.5
Martinsville	475	1,112	80	2.3	13.9	5.9	61.
Plymouth	329	2,485	120	7.6	20.6	2.7	78.
Portland	369	1,300	20	3.5	65.00	18.4	59.5
Salem	335	620	210	1.9	3.0	1.6	80.
Seymour	456	.....	30	.....	.....	15.2	72.5
Sullivan	440	2,461	54	5.5	45.5	8.1	80.5
Tipton	338	1,218	25	3.6	48.7	13.5	74.5
Wabash	450	2,500	84	5.5	29.7	5.3	80.
Whiting	461	18,500	100	40.1	185.	4.61	93.5
Clinton	601	2,031	16	33.8	127.0	3.8	69.5
Columbus	690	1,684	48	2.4	35.1	15.4	83.
Culver	698	8,250	132	11.8	62.5	5.3	89.
Evansville	836	2,055	84	2.4	24.4	10.0	87.5
Fort Wayne	960	6,737	84	7.0	80.0	11.4	94.
Frankfort	570	2,997	50	5.2	59.9	11.4	66.5

Table XIX—Continued

Name of School	Enrollment	Volumes in Library	Library Seating Capacity	Volumes per Pupil	Volumes per Seat	Pupils per Seat	Total Score
Gary	707	10,000	100	14.1	100.0	7.1	80.
Goshen	596	1,490	50	2.5	29.8	11.9	71.5
Huntington	583	1,096	88	1.9	12.5	6.6	69.5
Lafayette	900	2,366	25	2.6	94.6	36.0	77.
La Porte	842	2,563	66	3.0	38.6	12.8	87.
Logansport	684	3,400	75	5.0	45.3	9.1	90.
Michigan City	570	3,500	60	6.1	58.3	9.5	82.5
Mishawaka	890	4,003	64	4.5	62.5	13.9	83.
Newcastle	700	1,000	25	1.4	40.0	28.0	63.
Peru	670	1,350	60	2.1	22.5	11.2	63.5
Richmond	791	4,998	20	6.3	25.0	39.4	85.5
Shelbyville	565	2,685	38	4.8	70.7	14.9	77.5
Washington	523	600	25	1.1	24.0	21.0	65.5
Anderson	1,280	4,100	42	3.2	97.6	30.4	76.5
East Chicago	1,927	3,765	72	1.9	52.3	26.7	80.5
Evansville	1,568	6,007	60	3.8	100.1	26.1	82.5
Fort Wayne	1,260	8,560	125	6.8	68.5	10.1	93.
Gary	1,306	756	50	.6	15.1	26.1	83.
Hammond	1,350	3,250	72	2.4	45.1	18.8	75.
Indianapolis	1,787	7,500	150	4.2	50.0	11.9	92.5
Kokomo	1,066	2,843	30	2.7	94.7	35.5	54.5
Muncie	1,354	5,235	56	3.8	93.5	24.2	57.5
South Bend	1,900	5,000	75	2.6	66.6	25.4	89.
Indianapolis	4,974	12,175	184	2.4	66.0	27.0	82.5
Shortridge	2,322	8,202	292	3.5	28.0	7.9	76.
IOWA							
Audubon	235	1,300	20	5.5	65.0	11.7	21.5
Bedford	181	620	100	3.4	6.2	1.8	61.5
Dubuque	108	5,376	65	51.6	86.0	1.6	83.5
Eldora	218	1,150	.....	5.3	.....	.....	35.5
Emmetsburg	241	1,928	18	8.0	107.0	13.4	45.5
Guthrie	220	400	.....	1.8	.....	.....	12.
Hawarden	198	1,100	120	5.6	9.1	1.6	55.5
Hull	75	1,300	25	17.3	52.0	3.0	73.5
Mapleton	144	5,800	13	40.3	446.0	11.1	81.5
Moravia	107	1,337	14	12.5	95.5	7.6	73.5
Mt. Pleasant	206	1,200	100	5.8	12.0	2.0	45.
Oelwein Senior	240	1,790	36	7.5	49.7	6.7	80.5
Radcliffe	155	2,050	2	13.2	1,025.0	77.5	73.
Rock Rapids	175	1,630	15	9.3	11.7	108.8	46.
Stuart	130	3,000	0	23.1	.....	.....	71.5
Waverly:							
Wartburg Normal College	93	4,014	50	43.2	80.3	1.9	80.5
Waverly High	235	1,290	36	5.5	35.8	6.5	62.5
West Liberty	200	1,309	24	6.5	54.5	8.3	59.

Table XIX—Continued

Name of School	Enrollment	Volumes in Library	Library Seating Capacity	Volumes per Pupil	Volumes per Seat	Pupils per Seat	Total Score
Ames	362	1,335	102	3.6	13.1	3.5	71.
Belle Plaine	303	.....	10	.....	.....	30.3	31.5
Bloomfield	320	1,870	72	5.8	25.9	4.4	81.
Davenport	255	12,000	50	47.1	240.0	5.1	74.
Dubuque	327	2,600	60	7.9	43.3	5.4	74.5
Indianola	253	.....	.....	.....	.....	.....	70.5
Manchester	251	7,000	100	27.8	70.	2.5	77.5
Osage	255	2,005	214	7.8	9.3	1.2	31.
Shenandoah	412	900	.....	2.1	.....	.....	49.
Washington	410	2,090	25	5.1	83.6	16.4	74.
Cedar Rapids:							
Grant	610	2,040	52	3.3	39.2	11.7	72.5
Washington	850	3,108	36	3.7	86.5	23.6	73.5
Clinton	952	2,800	90	2.9	31.1	10.6	82.
Council Bluffs	610	2,300	147	3.7	15.6	4.2	81.5
Des Moines	976	2,669	.....	2.7	.....	.....	70.
Dubuque	708	4,325	60	6.1	72.3	11.8	80.5
Fort Dodge	974	3,456	78	3.6	44.4	12.5	67.
Marshalltown	513	1,075	204	2.1	5.3	2.5	75.5
Muscatine	652	2,500	90	3.8	27.8	7.2	60.5
Oskaloosa	649	2,431	86	3.8	67.5	18.0	84.5
Sioux City	507	987	100	1.9	9.9	5.1	67.
Waterloo	793	2,420	75	3.1	32.2	10.6	74.
Boone	1,147	5,500	216	4.8	25.4	5.3	75.5
Burlington	1,072	3,831	64	3.6	59.9	16.7	79.
Council Bluffs	1,004	2,046	40	2.0	51.1	25.1	72.5
Des Moines:							
Lincoln	1,401	2,500	80	1.8	31.2	17.5	92.
East High	1,499	.....	225	.....	.....	6.6	92.5
Theodore Roosevelt	1,620	3,175	72	2.0	44.2	22.4	78.
West High	1,082	5,200	250	4.8	20.8	4.3	68.5
Sioux City	1,315	6,293	120	4.8	52.4	11.0	88.
KANSAS							
Alma	96	1,200	.....	12.5	.....	.....	68.5
Ashland	164	1,346	69	8.2	19.5	2.4	89.
Atchison	248	45,000	50	181.5	900.0	5.0	84.5
Bucklin	144	1,115	20	7.7	55.7	7.2	78.
Caney	215	1,982	45	9.2	44.0	4.8	73.5
Cedar Vale	156	1,600	60	10.2	26.6	2.6	86.
Chapman	230	6,200	.....	27.0	.....	.....	80.
Cimarron	215	3,500	.....	16.3	.....	.....	34.
Cottonwood Falls	190	1,811	24	9.5	75.5	7.9	61.
Effingham	185	3,250	60	17.5	54.2	3.1	86.
Ellis	166	1,785	108	10.7	16.5	1.5	49.5
Eudora	95	1,032	.....	10.9	.....	.....	69.
Florence	219	2,358	40	10.7	59.0	5.5	66.5
Fredonia	215	800	88	3.7	9.1	2.4	44.

Table XIX—Continued

Name of School	Enrollment	Volumes in Library	Library Seating Capacity	Volumes per Pupil	Volumes per Seat	Pupils per Seat	Total Score
Garden City	230	1,450	100	6.3	14.5	2.3	28.5
Garnett	200	1,000	.....	5.0	.....	.....	44.5
Girard	239	3,035	.....	12.7	.....	.....	52.5
Glasco	120	1,150	12	9.5	95.5	10.0	80.
Greensburg	229	1,550	100	6.8	15.5	2.3	90.5
Harper	239	1,279	85	5.3	15.1	2.8	24.5
Hays	184	1,276	25	7.0	51.0	7.3	64.
Hoisington	243	1,000	130	4.1	7.7	1.9	27.5
Humboldt	217	1,942	96	8.9	20.2	2.3	62.
Jewell	125	2,040	.....	16.3	.....	.....	32.5
Kinsley	159	2,000	10	12.6	200.0	15.9	69.
Lawrence	54	1,170	30	21.7	39.0	1.8	69.5
Lindsborg	187	1,200	15	6.4	80.0	12.4	66.5
Mankato	118	700	15	5.9	46.7	7.8	31.
McLouth	103	1,000	25	9.7	40.0	4.1	82.5
Medicine Lodge	150	1,096	82	7.3	13.3	1.8	62.5
Miltonvale Rural	107	1,150	.....	10.7	.....	.....	66.
Oberlin	230	3,000	.....	13.0	.....	.....	63.5
Pawnee Rock	78	1,272	80	16.3	15.9	.97	72.
Phillipsburg	165	1,000	0	6.1	.....	.....	42.
Pittsburg	117	18,493	100	158.0	184.0	1.2	93.
Rossville	105	650	15	6.2	43.2	7.0	31.
Salina :							
Marymount Academy	40	8,350	120	209.0	69.5	.33	85.5
Sacred Heart	114	2,139	15	18.8	143.0	7.6	65.5
Sedan	161	1,350	50	8.4	27.0	3.2	60.
WaKeeney	201	1,784	10	8.9	178.4	20.1	73.
Wamego	166	1,200	108	7.2	11.1	1.5	71.
Washington	149	600	2	4.0	300.0	74.5	.....
Altamont	350	5,000	100	14.3	50.0	3.5	79.5
Belleville	250	2,200	30	8.8	73.3	8.3	94.5
Burlington	302	1,200	20	3.9	60.	15.1	81.
Cherryvale	315	1,509	30	4.7	50.3	10.5	67.5
Great Bend	375	1,383	.....	3.7	.....	.....	78.5
Hiawatha	272	3,655	14	13.1	254.0	19.5	72.
Iola	385	3,500	40	9.1	87.5	9.6	90.
Junction City	257	2,500	3	9.7	833.3	85.6	64.5
Kingman	320	1,000	100	3.1	10.	3.2	66.
Larned	262	1,073	140	4.1	7.6	1.8	51.
Leavensworth	85	7,420	35	87.2	212.0	2.4	92.
Marysville	312	3,000	25	9.6	120.	12.4	58.
Merriam	405	2,150	100	5.3	21.5	4.1	73.
Osawatomie	298	550	156	1.8	3.5	1.9	33.
Paola	334	815	.....	2.4	.....	.....	56.5
Pratt	275	3,505	60	12.7	58.4	4.5	82.5
St. Marys	272	11,524	70	42.37	164.6	3.8	74.5
Wellington	455	3,300	16	7.2	206.2	28.5	74.

Table XIX—Continued

Name of School	Enrollment	Volumes in Library	Library Seating Capacity	Volumes per Pupil	Volumes per Seat	Pupils per Seat	Total Score
Arkansas City	671	3,251	36	4.8	90.0	18.6	87.5
Atchison	817	5,500	160	6.7	34.4	5.1	88.5
Coffeyville	525	1,500	35	2.8	42.8	15.0	52.
Columbus	530	3,500	122	7.2	31.2	4.3	88.5
Emporia	641	4,556	25	7.1	182.5	25.6	87.
Hutchinson	879	7,257	150	8.3	48.4	5.9	86.
Independence	533	3,250	40	6.1	81.2	13.3	54.
Kansas City	703	5,218	48	7.4	108.5	14.6	75.5
Manhattan	530	5,287	100	10.0	52.9	5.3	78.
Neodesha	536	4,300	72	8.0	59.6	7.4	83.
Ottawa	630	4,000	150	6.5	26.7	4.1	75.
Pittsburg	746	3,252	108	4.4	30.1	6.9	61.
Winfield	837	4,143	140	4.9	29.6	6.0	81.
Kansas:							
Central High	1,758	3,700	75	2.1	49.3	23.4	73.5
Central	1,700	4,000	100	2.4	40.0	17.0	73.5
Topeka	1,627	6,000	125	3.7	48.0	13.0	66.
Wichita	2,647	10,600	275	4.0	38.5	9.6	94.
MICHIGAN							
Belding	225	1,500	182	6.7	8.2	1.2	69.
Grand Rapids	121	1,180	24	9.8	49.0	5.0	70.5
Lansing	240	7,399	80	30.8	92.5	3.0	87.5
Monroe	206	2,155	35	10.4	61.5	5.9	86.
Mount Pleasant	109	2,998	20	27.3	149.9	5.4	52.
Nazareth	68	12,200	.....	179.0	.....	.....	92.
Northville	160	2,000	12	12.5	167.0	13.3	69.
Norway	222	5,000	25	22.5	200.0	9.0	94.
Onaway	212	2,000	20	9.5	100.0	10.6	80.
Otsego	200	1,958	5	9.8	391.6	40.0	48.
Rochester	215	2,100	0	9.8	.....	.....	74.5
Rockford	180	1,450	80	8.0	18.1	2.2	70.5
St. Clair	120	3,300	75	27.5	44.0	1.6	62.
Stambaugh	205	8,620	75	42.0	115.0	2.7	83.5
Sturgis	237	2,000	30	8.4	66.6	7.9	84.
Wakefield	234	1,600	25	6.8	64.0	9.4	45.5
Wayne	202	3,000	84	14.8	35.7	2.4	66.
Zeeland	196	3,558	30	18.2	118.6	6.5	72.
Alma	303	3,400	85	11.2	40.0	3.6	69.
Ann Arbor	312	3,275	130	10.5	25.0	2.4	94.
Bad Axe	261	1,400	60	5.4	23.4	4.4	75.
Bessemer	267	2,843	12	10.7	237.0	22.2	70.
Caro	290	2,250	25	7.8	90.0	11.6	68.5
Crystal Falls	350	5,640	20	16.1	282.0	17.5	79.5
Detroit:							
College High	375	10,100	75	27.0	134.7	5.0	82.
North Strathmoor	375	1,000	24	2.6	40.6	15.6	88.

Table XIX—Continued

Name of School	Enrollment	Volumes in Library	Library Seating Capacity	Volumes per Pupil	Volumes per Seat	Pupils per Seat	Total Score
Dowagiac	363	5,059	150	13.9	33.7	2.4	50.5
Eaton Rapids	328	2,750	40	8.4	69.0	8.2	83.
Grand Haven	457	3,800	42	8.3	90.5	10.9	88.5
Greenville	300	13,051	36	43.5	362.0	8.3	86.5
Howell	328	5,188	16	15.8	324.0	20.5	78.5
Iron River	376	3,737	32	9.9	116.9	11.8	65.
Manistique	277	7,060	34	25.5	208.0	8.2	73.5
Marshall	396	1,219	20	3.1	60.1	19.8	31.
Mason	251	1,921	28	7.6	68.8	9.0	71.
Midland	360	1,350	12	3.8	112.2	30.0	75.
Munising	330	4,750	29	14.4	164.0	11.4	80.
Negaunee	420	.....	.....	.....	.....	.....	61.5
Niles	313	1,450	24	4.6	60.4	13.0	58.
Painesdale	403	15,044	60	37.4	251.0	6.7	87.
Petoskey	397	1,850	.....	4.6	.....	.....	60.5
St. Johns	353	8,979	65	25.5	138.0	5.4	89.
Three Rivers	430	3,000	24	7.0	125.0	17.9	57.5
Ypsilanti	311	2,790	100	9.0	27.9	3.1	75.
Adrian	526	5,000	295	9.5	17.0	1.8	78.5
Albion	776	7,000	50	9.0	140.0	15.5	89.5
Ann Arbor	780	34,000	46	43.6	740.0	16.9	88.5
Bay City	925	.....	100	.....	.....	9.9	84.
Big Rapids	505	2,000	120	4.0	16.7	4.2	58.5
Birmingham	600	4,000	40	6.7	100.	15.0	66.
Charlotte	500	10,000	40	20.0	250.0	12.5	78.5
Dearborn	501	4,167	72	8.3	58.0	7.0	92.5
Escanaba	637	2,740	80	4.3	34.2	8.0	76.5
Grosse Pointe	624	2,378	30	4.5	79.3	17.4	84.
Hancock	545	7,655	96	14.0	80.0	5.7	93.5
Hazel Park	568	1,508	24	2.6	62.6	23.7	81.
Holland	500	3,050	44	6.1	69.3	11.4	90.
Houghton	600	13,450	100	22.4	134.5	6.0	88.5
Ironwood	597	6,000	60	10.0	100.0	10.0	91.5
Menominee	832	6,000	80	7.2	75.0	10.4	97.
Monroe	619	5,000	40	8.1	125.0	15.5	77.5
Mt. Clemens	855	3,000	84	3.5	35.7	10.2	87.
Muskegon	840	4,840	77	5.8	62.8	10.9	91.5
Owosso	675	2,500	20	3.7	125.0	33.8	66.5
Plymouth	528	3,397	50	6.5	68.0	10.5	74.
Port Huron	624	2,371	49	3.8	49.4	13.0	80.5
Royal Oak	723	2,500	900	3.4	2.8	0.8	93.
Saginaw	715	8,000	100	11.1	80.0	7.2	82.
South Haven	608	2,000	60	3.3	33.3	10.1	93.5
Detroit:							
Redford	1,310	3,185	100	2.4	31.8	13.1	91.
Southeastern	1,864	5,645	110	3.0	51.2	17.0	82.
Western	1,916	4,500	80	2.4	56.2	24.0	78.5
Ferndale	1,126	3,230	138	2.8	23.4	8.2	88.5

Table XIX—Continued

Name of School	Enrollment	Volumes in Library	Library Seating Capacity	Volumes per Pupil	Volumes per Seat	Pupils per Seat	Total Score
Grand Rapids:							
Central	1,045	9,000	65	8.6	138.0	16.1	91.
Creston	1,140	7,218	111	6.3	65.0	10.3	90.
Ottawa Hills	1,226	3,500	120	2.9	29.2	10.2	83.5
South High	1,961	12,770	86	6.5	148.3	22.8	78.
Highland Park	1,634	5,176	608	3.2	.....	.....	93.
Jackson	1,334	7,000	104	5.2	67.2	12.8	96.
Kalamazoo	1,560	5,423	130	3.5	41.8	12.0	78.
Lansing	1,813	58,519	150	32.2	390.0	12.1	91.
Pontiac	1,462	12,435	64	8.5	194.3	22.8	90.5
Detroit:							
Cass Technical	3,790	6,500	120	1.7	54.1	31.4	83.5
Central High	2,760	3,600	160	1.3	22.5	17.2	83.
High School of Commerce	2,210	2,356	60	1.1	39.3	36.8	83.5
Eastern	2,888	5,500	60	1.9	91.9	48.1	44.
Northern	2,360	6,000	125	2.5	48.0	18.9	89.5
Northeastern	2,226	6,563	100	2.9	65.6	22.3	89.
Northwestern	4,319	8,000	90	1.8	89.0	48.1	86.
Southwestern	2,600	6,000	86	2.3	70.0	30.2	73.5
Flint	2,802	10,000	210	4.76	47.6	10.0	95.
Hamtramck	2,756	12,823	136	4.7	94.5	20.2	89.5
MINNESOTA							
Aitkin	201	1,800	17	9.0	106.0	11.8	32.5
Faribault	244	8,000	70	32.8	114.0	3.5	75.
Glencoe	163	9,000	30	55.2	300.0	5.4	71.
Hector	125	1,050	12	8.4	87.5	10.4	77.5
Jackson	166	2,500	20	15.0	125.0	8.3	75.
Keewatin	81	5,362	42	66.2	127.6	1.9	95.
Lake City	189	3,226	18	17.1	179.5	10.5	66.
Luverne	204	3,300	48	16.2	68.7	4.2	76.5
Morris	157	8,000	75	51.0	106.5	2.1	86.
Mt. Iron	211	931	18	4.4	51.6	11.7	33.5
Nashwauk	154	8,463	50	55.0	169.3	3.1	93.5
St. Paul	134	8,000	180	59.6	44.5	0.75	98.5
Windom	237	3,901	10	16.5	390.1	23.7	83.
Alexandria	352	982	.....	2.8	.....	.....	64.5
Anoka	285	5,333	25	18.7	213.5	11.4	88.5
Cloquet	471	1,689	25	3.6	67.5	18.8	76.5
Colerains	294	2,199	72	7.5	30.6	4.1	92.
Gilbert	256	7,360	24	28.7	307.0	10.6	76.
Minneapolis	272	.....	100	.....	.....	2.7	93.
Moorhead	450	3,000	36	6.7	82.4	12.5	82.5
Northfield	407	2,614	28	6.4	93.2	14.5	90.5
Pipestone	320	1,800	42	5.6	42.9	7.6	77.5
St. Paul:							
Humboldt	495	6,972	60	14.1	116.2	8.2	60.5

Table XIX—Continued

Name of School	Enrollment	Volumes in Library	Library Seating Capacity	Volumes per Pupil	Volumes per Seat	Pupils per Seat	Total Score
St. Joseph's Acad...	417	5,543	125	13.3	44.4	3.3	91.5
St. Peter	276	2,100	25	7.6	84.0	11.0	87.5
Sleepy Eye	278	1,350	24	4.8	56.1	11.6	82.
Thief River Falls.....	429	1,726	30	4.0	57.5	14.3	84.
Waseca	340	3,123	36	9.2	87.0	9.5	85.5
Winona	489	2,735	35	5.6	78.0	13.9	79.5
Worthington	283	2,010	12	7.1	167.5	23.6	70.
Bemidji	837	1,898	18	2.3	105.5	46.5	76.
Chisholm	509	2,304	35	4.5	65.6	14.5	92.
Crookston	625	1,800	15	2.9	120.0	41.7	71.
Duluth	853	2,017	120	2.4	16.8	7.1	86.
Faribault	717	2,260	14	3.2	161.5	51.2	68.5
Mankato	744	2,434	44	3.3	55.4	16.9	57.5
Minneapolis	846	9,854	110	11.6	89.5	7.7	94.5
Owatonna	706	3,707	51	5.3	72.5	13.8	55.
Red Wing	800	2,400	16	3.0	150.0	50.0	79.
St. Cloud	657	5,150	60	7.8	85.8	10.9	90.5
Winona	525	519	75	1.0	6.9	7.0	32.
Austin	1,056	2,300	50	2.2	46.0	21.1	86.5
Duluth	1,619	3,573	65	2.2	55.0	24.9	75.5
Minneapolis	1,977	6,017	92	3.0	65.5	21.5	87.
Rochester	1,280	4,631	72	3.6	64.4	17.8	84.5
Minneapolis:							
Central	2,023	14,275	85	7.1	168.0	23.8	81.
Roosevelt High	2,424	5,021	180	2.1	27.9	13.5	87.
South High	2,154	11,279	100	5.2	112.8	21.5	88.5
St. Paul	2,064	11,000	326	5.4	33.8	6.3	77.
MISSOURI							
Braymer	125	1,869	120	15.0	15.6	1.0	42.
Camden Point	27	3,436	25	127.5	137.5	1.1	73.5
Canton	130	.....	.....	.....	.....	.....	59.
Cape Guardian	66	1,287	53	19.5	24.3	1.2	63.5
Clayton	160	8,600	100	53.8	86.0	1.6	79.
Columbia	11	4,529	44	411.0	103.0	.25	88.5
Fayette	188	2,150	250	11.4	8.1	0.75	75.5
Ferguson	117	1,900	60	16.2	31.7	2.0	38.
Flat River	168	5,583	195	33.2	28.6	.86	92.5
Fulton	218	1,265	100	5.8	12.6	2.2	74.5
Hollister	130	5,649	50	43.5	112.9	2.6	53.5
Jackson	220	2,100	6	9.6	350.0	36.6	76.5
Kansas City:							
Country	70	1,527	16	21.8	95.5	4.4	65.
St. Teresa Academy	80	4,410	50	55.1	88.2	1.6	30.5
Lexington	135	3,061	25	22.6	122.5	5.4	79.5
Mexico	18	4,750	.....	264.0	.....	.....	80.5
Nevada	46	3,743	55	81.4	68.0	0.84	31.

Table XIX—Continued

Name of School	Enrollment	Volumes in Library	Library Seating Capacity	Volumes per Pupil	Volumes per Seat	Pupils per Seat	Total Score
Palmyra	150	1,750	90	117.0	194.0	1.7	43.5
Rolla	245	2,500	70	10.2	35.7	3.5	44.
Sedalia	119	1,696	200	14.3	8.5	.6	30.
St. Joseph	144	2,492	80	17.3	31.1	1.8	92.5
St. Louis:							
Visitation	132	15,245	24	115.5	635.0	5.5	90.
Christian Brothers..	190	10,600	60	55.0	176.6	3.1	79.
Hosmer Hall	110	1,650	15	15.0	110.0	7.3	78.5
Loretto Academy....	120	2,849	24	23.8	119.0	5.0	75.
St. Elizabeth Acad.	216	4,383	24	20.3	182.5	9.0	85.
Santa Maria in							
Ripa	61	6,976	10	114.0	697.6	6.1	58.
Wellston	190	2,538	85	13.4	29.9	2.2	71.
Aurora	300	1,250	300	4.16	4.16	1.0	60.5
Bethany	300	4,500	150	15.0	30.0	2.0	60.5
Boonville	383	1,800	-----	4.7	-----	-----	66.5
Carrollton	258	3,150	-----	12.2	-----	-----	60.5
Clayton	275	1,950	85	7.1	23.0	3.2	47.
Columbia	456	13,500	200	7.8	17.5	2.3	80.5
De Soto	250	2,295	-----	9.2	-----	-----	69.
Kirkwood	366	2,300	16	6.3	144.0	22.8	72.5
Maryville	316	2,300	20	7.3	115.0	15.8	81.
Nevada	330	5,217	130	15.8	40.1	2.5	81.5
St. Charles	303	1,280	120	4.2	10.7	2.5	78.
St. Joseph	378	-----	-----	-----	-----	-----	23.5
St. Louis	270	12,000	157	44.4	76.4	1.7	83.
Unionville	278	-----	-----	-----	-----	-----	47.
Warrenburg	269	3,500	89	13.0	39.3	3.0	85.5
Webb City	433	2,900	50	6.7	58.0	8.6	70.5
West Plains	288	1,574	100	5.5	15.7	2.8	65.5
Cape Girardeau	610	8,705	170	14.3	51.1	3.6	84.5
Carthage	599	3,915	40	6.5	97.9	15.0	78.5
Independence	609	2,435	250	4.0	9.7	2.4	78.
Maplewood	900	3,224	0	3.6	-----	-----	55.
Marshall	525	5,000	80	9.5	62.5	6.5	67.5
St. Joseph	938	5,598	96	6.0	58.4	9.8	85.5
St. Louis	727	3,920	82	5.4	47.8	8.9	89.
Kansas City:							
Central Senior	1,811	13,000	100	7.2	130.	18.1	90.
Lincoln	1,131	7,100	148	6.3	48.0	7.6	87.5
Manual Training....	1,802	4,600	42	2.5	109.5	43.0	67.
Southwest	1,206	8,000	148	6.6	54.0	8.2	86.
Springfield	1,670	13,058	32	78.0	407.5	52.1	76.
University City	1,029	4,425	70	4.3	63.2	14.7	69.
St. Louis:							
Beaumont	2,800	12,000	120	4.3	100.0	23.3	82.5
Grover Cleveland....	2,100	5,381	112	2.6	48.0	18.7	85.5

Table XIX—Continued

Name of School	Enrollment	Volumes in Library	Library Seating Capacity	Volumes per Pupil	Volumes per Seat	Pupils per Seat	Total Score
Roosevelt	2,770	7,000	118	2.5	59.4	23.4	62.
Soldan High	2,608	8,000	80	3.1	100.0	32.6	85.5
MONTANA							
Conrad	150	4,268	0	28.5	.....	.....	74.5
Deer Lodge	246	1,035	16	4.2	64.5	15.3	53.5
Glasgow	237	2,000	22	8.5	91.0	10.8	57.
Phillipsburg	89	1,404	8	15.7	175.5	11.1	92.
Plentywood	150	1,400	10	9.3	140.0	15.0	48.
Polytechnic	110	6,000	30	54.5	200.0	3.7	90.5
Sidney	180	.....	25	.....	7.2	.....	79.5
Townsend	98	1,560	20	15.9	78.0	4.9	73.5
Dillon	270	2,712	32	10.0	85.5	8.5	90.
Glendive	285	1,800	32	6.5	56.	8.6	75.5
Red Lodge	261	1,518	.....	5.8	.....	.....	43.
Roundup	292	1,253	30	4.3	42.3	9.7	73.5
Bozeman	550	4,000	60	7.3	66.6	9.2	95.
Kalispell	625	6,280	60	10.0	104.7	10.4	88.
Missoula	900	6,500	60	7.2	108.3	15.0	84.
NEBRASKA							
Arnold	150	800	24	5.3	33.4	6.2	40.5
Bayard	176	800	6	4.5	133.3	29.6	58.5
Callaway	206	1,570	125	7.6	12.5	1.6	63.5
Chadron	96	9,332	83	97.0	112.0	1.1	88.
Crawford	163	.....	.....	.....	.....	.....	58.
Fullerton	210	1,125	170	5.4	6.6	1.2	49.
Geneva	210	800	200	3.8	4.0	1.05	53.5
Gordon	198	300	15	1.5	20.0	13.2	46.5
Gothenberg	237	2,100	99	8.9	21.2	2.4	70.
Havelock	213	300	225	1.4	1.3	0.95	56.
Hebron	76	.....	.....	.....	.....	.....	84.
Lincoln	225	2,674	24	11.9	111.2	9.3	81.5
Mead	91	1,500	15	16.5	100.0	6.1	40.5
Mitchell	150	400	18	2.7	22.2	8.3	38.
Omaha	60	1,000	40	16.6	25.0	1.5	78.
Osceola	138	700	.....	5.1	.....	.....	19.
Peru	114	35,528	130	312.0	274.0	.88	83.
Stanton	172	1,500	.....	8.7	.....	.....	60.5
Tecumseh	195	500	.....	2.6	.....	.....	30.5
Valentine	150	.....	12	.....	12.5	.....	24.5
Valley	110	75	.....	.68	.....	.....	32.5
Wahoo	90	6,363	24	71.0	265.0	3.7	75.5
Wisner	210	3,700	.....	17.6	.....	.....	71.
Wymore	237	1,200	100	5.0	12.0	2.4	57.
Auburn	270	500	.....	1.8	.....	.....	34.5
Broken Bow	320	1,900	.....	5.9	.....	.....	31.

Table XIX—Continued

Name of School	Enrollment	Volumes in Library	Library Seating Capacity	Volumes per Pupil	Volumes per Seat	Pupils per Seat	Total Score
Columbus	376	2,300	162	6.1	14.2	2.3	59.
Kearney	435	2,125	88	4.9	24.1	5.0	63.5
McCook	250	1,000	50	4.0	20.0	5.0	66.5
Grand Island	630	2,240	.....	3.6	.....	.....	84.5
Norfolk	635	1,560	34	2.5	45.9	18.7	47.
Omaha	688	1,182	68	1.7	17.4	10.1	73.5
Omaha:							
Central High	1,750	17,000	106	9.7	160.0	16.5	87.
North High	1,145	2,500	95	2.2	26.4	12.1	70.5
Lincoln	2,000	5,534	98	2.8	56.5	20.4	67.5
Omaha	3,326	12,280	331	3.7	37.0	10.1	94.5
NEW MEXICO							
Alamogordo	165	1,200	40	7.3	30.0	4.1	73.5
Artesia	210	1,200	20	5.7	60.0	10.5	78.5
Belen	162	1,043	20	6.5	52.1	8.1	77.5
Carlsbad	215	2,200	36	10.2	61.0	6.0	90.
Clayton	215	2,575	80	12.0	32.2	2.7	87.
Dawson	115	2,000	15	17.4	133.3	7.6	36.
N. Las Vegas.....	125	2,060	12	16.5	172.0	10.4	72.5
Gallys	218	1,243	12	5.7	103.0	18.2	53.5
Hurley	121	814	10	6.7	81.4	12.1	38.5
Montezuma	49	6,000	60	122.5	100.0	0.8	84.
Santa Rosa	75	420	0	5.6	.....	.....	12.
Sacarro	114	1,500	20	13.2	75.0	5.7	64.
Springer	90	1,258	60	14.0	21.0	1.5	60.5
Tularosa	125	825	40	6.6	20.6	3.1	71.5
Portales	286	1,048	30	3.7	34.9	9.5	62.5
Raton	343	2,150	40	6.3	53.7	8.6	79.5
Roswell	586	2,275	35	3.9	65.0	16.7	72.5
NORTH DAKOTA							
Aneta	74	1,000	6	13.5	167.0	12.3	52.5
Bisbee	68	2,486	.....	36.5	.....	.....	67.
Bowbells	101	1,000	.....	9.9	.....	.....	84.5
Bowman	112	1,876	50	16.7	37.5	2.2	78.
Cooperstown	195	3,059	2	15.7	1,529.5	97.5	25.5
Dickinson	235	.....	.....	.....	.....	.....	72.
Drake	98	1,470	10	15.0	147.0	9.8	20.
Edgeley	126	2,000	10	15.9	200.0	12.6	83.
Ellendale	131	1,758	4	13.4	439.5	32.7	69.
Enderlin	135	1,052	30	7.8	35.0	4.5	82.
Hettinger	175	945	22	5.4	43.0	8.0	79.
Hillsboro	147	800	25	5.4	32.0	6.0	73.
Jamestown	104	3,300	48	31.8	68.7	2.2	88.
Kenmare	185	2,118	24	11.5	89.0	7.7	68.

Table XIX—Continued

Name of School	Enrollment	Volumes in Library	Library Seating Capacity	Volumes per Pupil	Volumes per Seat	Pupils per Seat	Total Score
Mandon	221	1,200	25	5.4	48.0	8.8	59.5
Mayville	136	820	0	6.0	.....	.....	78.5
Mohall	134	1,286	25	9.6	51.4	5.3	82.
Mott	117	1,331	2	11.4	665.5	58.5	71.5
New Salem	98	1,200	8	12.2	150.0	12.2	79.5
Velva	157	1,470	10	9.4	147.0	15.7	75.
Bismarck	497	3,220	.....	6.5	.....	.....	37.
OHIO							
Ada	226	1,294	130	5.7	10.0	1.7	23.5
Amherst	205	530	35	2.6	15.1	5.7	68.5
Arcadia	112	850	15	7.6	56.6	7.4	78.5
Archbold	190	1,150	5	6.1	230.0	38.0	60.5
Bexley	23	12,000	24	522.0	500.0	0.96	72.
Bradford	164	1,525	15	9.3	109.0	11.7	45.5
Cadiz	200	1,261	50	6.3	25.2	4.0	67.5
Canal Winchester	118	1,556	12	13.2	130.0	9.8	50.
Cincinnati:							
Academy of Sacred Heart	47	10,000	100	213.0	100.0	47	74.
Hartwell	150	1,100	10	7.3	110.0	15.0	52.
Cleveland:							
Lourdes Academy ..	225	1,373	24	6.1	57.1	9.4	89.5
State High	174	1,500	50	8.6	30.0	3.5	69.5
University	195	4,500	24	23.0	187.0	8.1	68.
Columbus:							
Columbus Academy	62	250	10	4.0	25.0	6.2	32.
Guynn School of Concentration	9	500	6	55.5	83.3	1.5	54.
St. Joseph Academy	175	6,400	50	36.6	128.0	3.5	90.
Dayton	238	1,378	12	5.8	114.6	19.8	61.
Euclid:							
Euclid Central	165	1,800	20	10.9	90.0	8.2	76.
Shore High	208	3,801	24	18.5	158.0	8.6	80.
Fairport	126	3,521	80	27.9	44.0	1.6	74.5
Glendale	33	2,700	25	82.0	108.0	1.3	83.5
Hudson	115	5,911	30	51.4	197.0	3.8	81.
Huntsville	92	1,020	10	11.0	102.0	9.2	55.
Leavittsburg	50	785	45	9.8	17.5	1.8	83.
Madison	180	750	.....	4.2	.....	.....	61.
McComb	171	.....	35	.....	.....	4.9	58.
McDonald	180	2,510	8	13.9	313.7	22.5	81.
Mechanicsburg	118	3,000	24	25.4	125.0	4.9	45.
Mentor	242	4,300	50	17.8	86.0	4.8	92.5
Milan	94	7,470	30	79.6	249.0	3.1	84.
Monclova	60	1,250	12	20.8	104.0	5.0	79.5
Mt. Gilead	121	785	10	6.5	78.5	12.1	62.
Mt. St. Joseph	92	3,000	50	32.6	60.0	1.8	81.

Table XIX—Continued

Name of School	Enrollment	Volumes in Library	Library Seating Capacity	Volumes per Pupil	Volumes per Seat	Pupils per Seat	Total Score
Mt. Sterling	105	1,200	16	11.4	75.0	6.5	63.5
New Bremen	140	14,009	.....	7.5	.....	.....	39.
New Concord	140	14,009	200	100.0	70.0	.7	71.5
New Washington	106	1,083	25	10.2	43.3	4.2	73.5
Oak Harbor	245	2,395	.....	9.7	.....	.....	57.
Osborn	149	2,040	7	13.7	291.4	21.3	64.
Ravenna	107	1,400	10	13.1	140.0	10.7	55.5
Reading	60	3,500	40	58.3	87.5	1.5	60.
Rockford	134	800	20	6.0	40.0	6.7	75.
Rossford	170	1,360	50	8.0	27.2	3.4	69.5
Tippecanoe City	172	1,500	15	8.7	100.0	11.5	67.
Vanlue	109	795	65	7.3	12.2	1.7	69.
Waterville	140	20,000	18	143.0	1,120.0	7.8	80.5
West Alexandria	126	1,552	8	12.3	194.0	15.7	74.
West Liberty	90	658	20	7.3	32.9	4.5	48.
Wickliffe	83	563	10	6.8	56.3	8.3	60.5
Woodfield	180	1,220	40	6.8	30.5	4.5	83.5
Barnesville	299	1,000	196	3.3	5.1	1.5	67.
Bedford	318	7,100	44	22.3	161.0	7.2	90.
Bexley	275	6,000	30	21.8	200.0	9.2	90.5
Bluffton	250	1,450	6	5.8	241.7	41.7	61.5
Bucyrus	366	735	76	2.1	10.0	4.8	74.
Cleveland:							
Notre Dame High..	395	7,000	36	17.7	194.0	10.9	87.5
St. Ignatius	425	11,000	60	25.8	183.0	7.1	86.5
Conneaut	420	1,620	24	3.9	67.5	17.5	71.5
Crestline	323	500	20	1.5	25.0	16.1	28.
Dayton	419	1,000	36	2.4	27.8	11.6	75.
Delaware	450	.....	32	.....	14.1	.....	56.5
E. Palestine	303	.....	30	.....	.....	10.1	38.5
Galion	350	800	18	2.3	44.5	19.5	83.5
Gallipolis	346	12,000	40	34.6	300.	8.6	80.5
Kent	301	1,936	30	6.4	64.5	10.0	85.
Lisbon	320	800	30	2.5	26.6	10.6	54.
Lockland	265	1,500	80	5.6	18.7	3.3	58.5
Logan	308	1,675	76	5.4	22.1	4.1	63.5
Minerva	280	7,000	13	25.0	536.0	21.5	70.
Mingo Jct.	250	1,150	25	4.6	46.0	10.0	83.5
Montpelier	251	1,652	20	6.6	82.6	12.6	79.5
Nelsonville	275	950	15	3.4	63.2	18.3	37.
New Lexington	362	800	105	2.2	7.6	3.4	52.
Norwalk	385	1,583	120	4.1	13.2	3.2	84.
Rocky River	380	4,500	40	11.8	112.5	9.5	85.5
St. Marys	390	1,800	30	4.6	60.0	13.0	73.5
Shelby	387	1,200	20	3.1	60.0	19.3	77.5
Sidney	462	13,350	100	28.8	133.5	4.6	78.5
Struthers	482	1,802	30	3.7	60.1	16.1	84.5
Sylvania	420	4,200	40	10.0	105.0	10.5	88.

Table XIX—Continued

Name of School	Enrollment	Volumes in Library	Library Seating Capacity	Volumes per Pupil	Volumes per Seat	Pupils per Seat	Total Score
Toledo	316	5,863	70	18.5	83.7	4.5	62.5
Toronto	346	850	25	2.5	34.0	13.9	75.
Upper Arlington	250	1,500	40	6.0	37.5	6.2	65.5
Wapakoneta	452	4,000	50	8.8	80.0	9.0	76.5
Westerville	320	1,600	0	5.0	.....	.....	58.
Willard	250	1,000	25	4.0	40.0	10.0	73.
Xenia	369	1,300	24	3.5	54.1	15.4	67.5
Akron:							
East High	988	1,200	45	1.2	26.6	21.9	66.
North High	850	1,200	65	1.4	18.5	13.1	63.5
Ashtabula	597	7,300	36	12.2	203.0	16.6	93.5
Barberton	800	1,200	60	1.5	20.0	13.3	68.
Bellaire	760	3,500	36	4.6	97.3	21.0	78.
Bellefontaine	552	1,550	10	2.8	155.0	55.2	38.5
Campbell	895	2,300	65	2.6	35.4	13.7	71.5
Cincinnati:							
Walnut Hills High	721	5,600	40	7.8	140.0	18.0	87.5
St. Xavier	574	4,000	180	7.0	22.2	3.2	47.5
Cleveland:	570	5,313	30	9.3	177.1	19.0	89.5
Shaker Heights	525	10,000	72	19.0	139.0	7.3	97.5
Columbus	899	5,598	54	6.2	103.6	16.6	88.5
Cuyahoga	650	3,600	125	5.5	28.8	5.2	89.
Defiance	569	1,000	20	1.7	50.0	28.5	62.
East Liverpool	999	1,200	12	1.2	100.0	83.2	49.5
Findley	610	3,219	130	5.3	24.8	4.7	83.
Garfield Heights	676	2,001	10	3.0	200.1	67.6	80.
Girard	574	3,761	36	6.6	104.8	15.9	79.5
Greenville	583	19,587	100	33.6	195.9	5.8	88.5
Mansfield	950	4,000	80	4.2	50.0	11.9	91.
Marion	900	1,200	40	1.3	30.0	22.5	77.5
Martins Ferry	702	5,000	40	7.1	125.0	17.6	80.5
Mt. Vernon	652	3,000	25	4.6	120.0	26.1	77.5
Piqua	561	2,400	.....	4.3	.....	.....	72.
Ravenna	536	2,000	24	3.7	83.4	22.5	81.5
Salem	584	1,700	40	2.9	42.5	14.6	62.
Steubenville	792	2,000	45	2.5	44.4	17.6	81.5
Warren	868	4,330	80	5.0	54.1	10.8	86.5
Wooster	635	3,000	60	4.7	50.0	10.6	82.5
Akron:							
Central High	1,020	1,710	60	1.7	28.5	17.0	81.
South High	1,200	4,000	175	3.3	22.9	6.8	94.
Alliance	1,194	2,000	50	1.7	40.0	23.6	68.
Cincinnati	1,516	10,324	84	6.8	122.0	18.0	97.5
Cleveland:							
Central High	1,207	17,348	85	14.4	204.0	14.2	84.
East High	1,342	9,188	90	6.8	102.0	14.9	90.
Glenville High	1,699	7,219	150	4.2	48.1	11.9	92.
West High	1,980	20,000	60	10.1	333.0	33.0	95.

Table XIX—Continued

Name of School	Enrollment	Volumes in Library	Library Seating Capacity	Volumes per Pupil	Volumes per Seat	Pupils per Seat	Total Score
Heights High	1,238	6,500	120	5.2	54.1	10.3	94.5
Columbus	1,717	8,000	640	4.6	12.5	2.7	88.
Elyria	1,252	2,800	40	2.2	70.0	31.3	91.5
Lakewood	1,808	6,919	90	3.8	76.9	20.0	89.5
Lima:							
Central High	1,695	3,671	85	2.2	43.2	20.0	82.
South High	1,280	5,386	62	4.2	86.8	20.6	86.5
Lorain	1,303	4,250	70	3.3	60.7	18.6	70.5
Springfield	1,370	1,768	500	1.3	3.5	2.7	83.5
Toledo	1,726	4,800	75	2.8	64.0	23.0	68.
Youngstown:							
Rayon High	1,506	4,063	65	2.7	62.5	23.2	79.5
South High	1,654	3,000	54	1.8	55.5	30.1	76.5
Cincinnati:							
Withrow High	2,400	6,600	84	2.7	78.5	28.6	87.
Hughes	2,900	6,835	110	2.4	62.0	26.4	66.5
Cleveland:							
East Technical	2,600	11,000	125	.....	.....	.....	93.5
John Adams	3,272	6,232	75	1.9	83.0	43.5	76.5
Lincoln High	3,280	14,250	55	4.4	259.0	59.5	86.
South High	2,450	9,000	150	3.7	60.0	16.3	81.
Toledo:							
E. Drummond	2,038	3,768	100	1.8	37.7	20.4	71.5
Jesup W. Scott	2,133	6,125	65	2.9	94.1	32.8	86.5
OKLAHOMA							
Alva	245	1,600	100	6.6	16.0	2.4	83.5
Atoka	155	1,113	.....	7.2	.....	.....	73.5
Copan	77	2,892	15	37.5	192.0	5.1	88.5
Dowey	281	1,429	50	6.5	28.6	4.4	88.
Eufaula	190	1,200	90	6.3	13.3	2.1	35.
Fairview	200	1,299	94	6.5	13.8	2.1	70.5
Garber	141	1,451	.....	10.3	.....	.....	84.
Guymon	195	2,004	18	10.3	111.0	10.8	83.
Healdton	213	967	75	4.5	12.9	2.9	76.5
Hominy	234	1,460	90	6.2	16.2	2.6	74.
Hoskell	240	3,000	82	12.5	36.5	2.9	38.5
Jefferson	85	902	7	10.9	129.0	11.9	41.5
Norman	126	2,100	40	16.7	52.5	3.1	89.
Osage	55	1,005	30	18.3	33.5	1.8	55.
Perry	220	1,770	96	8.0	18.4	2.3	81.5
Pryor	235	1,100	200	4.7	5.5	1.2	66.5
Sayre	143	1,492	30	10.4	49.7	4.8	75.
Tulsa	38	700	38	18.4	18.4	1.0	63.5
Walters	211	825	132	3.9	6.3	1.6	70.5
Yukon	205	1,564	68	7.6	23.0	3.0	73.5
Ada	485	2,000	75	4.1	26.7	6.5	64.5
Bristow	418	2,423	90	5.8	27.0	4.6	76.5

Table XIX—Continued

Name of School	Enrollment	Volumes in Library	Library Seating Capacity	Volumes per Pupil	Volumes per Seat	Pupils per Seat	Total Score
Clinton	376	1,287	.....	3.4	.....	.....	54.5
Duncan	480	5,000	30	10.4	166.6	16.0	86.5
Frederick	380	1,711	18	4.5	95.0	21.0	75.
Grandfield	280	1,693	.....	6.1	.....	.....	80.
Hugo	315	1,350	.....	4.3	.....	.....	78.5
Lawton	441	1,671	115	3.8	14.5	3.8	78.
Marlow	272	1,068	90	3.9	11.8	3.0	74.
Norman	444	1,700	80	3.8	21.2	5.5	84.5
Pauls Valley	375	3,000	95	8.0	31.6	4.0	80.5
Sand Springs	497	3,372	50	6.8	67.4	10.0	49.
Stillwater	347	1,272	3	3.6	424.0	115.6	37.
Tulsa	313	4,500	40	14.4	112.5	8.0	79.5
Wilson	281	1,400	57	5.0	24.6	4.9	81.5
Bartlesville	500	4,816	.....	9.6	.....	.....	77.
Oklahoma	1,436	11,206	135	7.8	83.0	10.6	90.5
Oklmulgee	1,460	7,160	56	4.8	128.0	26.0	78.5
Ponca City	1,221	3,600	72	3.0	50.0	17.0	83.5
Tulsa	2,588	17,730	120	6.8	147.7	21.6	81.5

SOUTH DAKOTA

Bryant	77	1,085	5	14.1	217.0	15.4	84.
Castlewood	75	800	40	10.7	20.0	1.9	79.
Centerville	126	.....	.....	.....	.....	.....	62.5
Egan	94	965	6	10.3	161.0	15.6	34.
Gregory	196	1,108	.....	5.6	.....	.....	61.
Groton	150	2,251	6	15.0	375.0	25.0	72.
Highmore	156	1,504	30	9.6	50.1	5.2	70.5
Howard	165	1,300	8	7.9	162.5	20.5	79.
Huron	7	14,568	60	2,081.1	242.6	0.12	92.
Ipswich	120	887	.....	8.1	.....	.....	42.
Milbank	235	1,396	25	5.9	56.7	9.4	96.5
Mobridge	204	1,772	.....	8.7	.....	.....	36.5
Montrose	89	800	4	9.0	200.0	22.2	41.5
Onida	109	1,692	6	15.5	282.0	18.1	77.
Platte	214	1,416	110	6.6	12.9	2.0	68.5
Sisseton	220	1,963	12	9.0	163.0	18.3	64.5
Tyndall	149	.....	5	.....	.....	30.0	44.
Viborg	108	800	90	7.4	8.9	1.2	78.5
Volga	110	950	110	8.6	8.6	1.0	57.
Webster	190	1,800	45	9.5	40.0	4.2	60.
Wessington	105	850	.....	8.1	.....	.....	50.5
Brookings	336	1,600	24	4.8	66.6	14.1	59.5
Lead	450	9,282	40	20.6	232.0	11.2	84.5
Pierre	331	2,540	100	7.7	25.4	3.3	73.
Redfield	267	1,276	36	4.8	35.4	7.4	79.
Watertown	381	2,955	50	7.8	59.1	7.6	78.5

Table XIX—Continued

Name of School	Enrollment	Volumes in Library	Library Seating Capacity	Volumes per Pupil	Volumes per Seat	Pupils per Seat	Total Score
Yankton	364	3,625	24	10.0	151.0	15.1	68.5
Aberdeen	565	5,900	65	10.4	91.0	8.7	93.5
Huron	601	16,751	64	28.0	262.0	9.4	89.
Sioux Falls	1,225	7,603	65	6.2	117.0	18.8	90.5
WEST VIRGINIA							
Berwind	180	.....	900	.....	.....	0.2	57.5
Hundred	100	1,027	15	10.3	68.5	6.7	67.
Institute	185	1,375	150	7.4	9.1	1.2	91.5
Keyser	30	3,800	150	126.6	25.4	0.2	68.5
Kingwood	218	2,000	20	9.2	100.0	10.9	67.5
Lost Creek	101	1,103	40	11.0	27.6	2.5	72.5
Marlinton	215	1,525	86	7.1	17.7	2.5	86.5
Middlebourne	245	2,400	25	9.8	96.0	9.8	82.5
Montgomery	112	1,172	35	10.5	33.5	3.2	81.
Newburg	105	800	25	7.6	32.0	4.2	71.5
Pennsboro	204	1,225	25	6.0	49.0	8.2	74.
Pine Grove	91	1,000	36	11.0	27.8	2.5	56.
Renick	69	850	.....	12.3	.....	.....	53.5
Ronceverte	170	1,500	70	8.8	21.4	2.4	71.
St. Alban	225	2,156	70	9.6	30.8	3.2	81.5
Salem	152	1,814	30	12.0	60.5	5.1	81.5
Thomas	228	2,300	40	10.1	57.5	5.7	81.5
Wheeling	205	1,309	20	64.0	65.4	10.2	77.
Ceredo Kenova	420	4,600	180	10.9	25.6	2.3	75.
Clarksburg	273	1,858	30	6.8	61.9	9.1	92.5
Clendonin	275	1,800	40	6.5	45.0	6.9	60.5
Noundsville	435	1,700	108	3.9	15.7	4.0	65.
Philippi	300	1,400	20	4.6	70.0	15.0	36.
Princeton	396	2,200	36	5.5	61.0	11.0	76.
Shinnston	260	3,500	90	13.5	39.0	2.9	67.5
Weirton	265	2,375	30	9.0	79.0	8.8	87.
Charleston	978	4,000	180	4.1	22.2	5.4	86.
Clarksburg	943	4,000	56	4.3	71.5	16.8	85.
Fairmont:							
East High	502	1,895	50	3.8	37.9	10.0	77.5
Fairmont High	645	5,600	40	8.7	140.0	16.1	91.5
Nelch	535	4,000	30	7.5	133.3	17.8	89.
Wheeling:							
Triadelphia High	595	2,683	35	4.5	76.6	17.0	79.
Wheeling High	930	670	80	.7	8.4	11.5	75.5
Huntington	1,386	4,200	90	3.0	46.6	15.4	71.5
Morgantown	1,175	7,484	126	6.4	59.3	9.3	93.5
Parkesburg	1,332	5,894	68	4.4	86.7	19.6	86.
WISCONSIN							
Beaver Dam	119	4,278	74	36.0	57.9	1.6	66.

Table XIX—Continued

Name of School	Enrollment	Volumes in Library	Library Seating Capacity	Volumes per Pupil	Volumes per Seat	Pupils per Seat	Total Score
Brodhead	125	3,391	.....	27.1	.....	.....	80.5
Columbus	225	1,690	23	7.5	73.5	9.8	80.5
Dodgeville	182	1,713	20	9.4	85.6	9.1	68.5
Durand	150	1,570	30	10.4	52.3	5.0	95.5
Ellsworth	215	6,126	30	28.5	204.2	7.2	78.
Elray	150	920	17	6.1	54.0	8.8	80.5
Florence	120	1,485	10	12.4	143.5	12.0	77.
Jefferson	187	700	90	3.7	7.7	2.1	71.
La Crosse	60	4,280	20	71.3	214.0	3.0	87.5
Lake Geneva	188	2,500	16	13.3	156.3	11.8	63.
Lake Mills	181	1,840	24	8.6	76.5	8.9	88.
Mauston	212	2,500	25	11.8	100.0	8.5	75.5
Mineral Point	187	2,285	10	12.2	228.5	18.7	54.5
Mondovi	200	1,800	15	9.0	120.	13.3	61.
Port Washington	154	4,375	24	28.4	182.5	6.4	83.5
Sinsinawa	108	4,320	20	40.0	216.0	5.4	80.5
Stanley	200	1,956	20	9.8	97.8	10.0	76.
Superior	246	1,650	66	6.7	25.0	3.7	74.5
W. DePere	176	3,500	200	20.0	17.5	0.88	83.
Beaver Dam	401	3,000	.....	.....	.....	.....	87.5
Berlin	335	2,807	14	8.4	200.5	24.0	81.5
Chippewa Falls	325	2,550	12	7.80	212.0	27.1	64.
Delafield	419	2,500	102	6.0	24.5	4.1	81.
Edgerton	285	2,350	10	8.3	235.0	28.5	84.5
Ft. Atkinson	261	3,310	23	12.7	144.0	11.3	81.
Hartford	257	1,250	13	4.8	96.0	19.8	68.5
Hurley	327	1,957	50	6.0	39.1	6.3	90.
Kankanna	352	2,397	41	6.8	58.5	8.6	72.
Ladysmith	385	746	24	1.9	31.1	16.0	18.5
Marshfield	365	4,592	25	12.6	183.5	14.6	85.5
Medford	290	2,840	20	9.8	142.0	14.5	82.5
Menasha	250	.....	.....	.....	.....	.....	86.
Menominee	425	3,350	60	7.9	56.0	7.1	89.
Milwaukee	316	6,000	87	19.0	69.0	3.6	79.
Neenah	420	2,583	26	6.2	99.5	16.2	74.5
Platteville	387	2,860	20	7.4	143.0	19.3	77.5
Plymouth	285	.....	.....	.....	.....	.....	89.
Portage	407	2,900	20	7.2	145.0	20.3	73.5
Prairie du Chien	325	22,380	80	68.6	254.0	4.1	90.5
Reedsburg	280	1,300	16	4.6	81.1	17.5	65.5
Rhineland	342	1,528	24	4.5	63.5	14.2	87.
Richland Center	375	1,925	20	5.1	96.3	18.8	79.5
South Milwaukee	451	6,648	36	14.7	184.0	12.5	77.
Stoughton	418	2,278	15	5.5	132.0	27.8	71.5
Sturgeon Bay	320	1,850	14	5.8	13.2	22.8	72.
Torrah	452	1,854	100	4.1	18.5	4.5	90.5
Viroqua	313	2,225	42	7.1	53.0	7.4	76.5
Watertown	392	1,917	14	4.9	136.6	28.0	71.

Table XIX—Continued

Name of School	Enrollment	Volumes in Library	Library Seating Capacity	Volumes per Pupil	Volumes per Seat	Pupils per Seat	Total Score
Waupaca	268	3,400	30	12.7	113.0	8.9	87.5
Wauwatosa	450	3,250	46	7.2	70.8	9.8	88.5
Antigo	750	2,311	42	3.1	55.0	17.8	79.5
Appleton	847	7,630	36	9.0	211.0	23.5	88.5
Ashland	825	9,261	64	11.2	144.6	12.9	82.5
Beloit	735	2,475	16	3.3	155.0	46.0	78.
Fond du Lac	825	5,896	60	7.2	98.3	13.7	80.
Green Bay:							
East High	850	4,090	160	4.8	25.6	5.3	95.
West High	696	5,180	62	7.3	83.5	11.2	90.
Madison	875	3,167	72	3.6	44.0	12.1	72.
Milwaukee	704	8,517	—	12.1	—	—	70.5
Monroe	590	1,300	25	2.2	52.0	23.6	77.
Stevens Point	704	2,876	42	4.1	68.5	16.7	69.5
Two Rivers	501	2,999	42	6.0	71.5	11.9	90.
Kenosha	1,076	3,600	70	3.3	51.4	15.4	88.5
La Crosse	1,200	3,538	40	3.0	88.4	30.0	75.
Manitowoc	1,058	3,784	105	3.5	35.4	10.1	91.
Milwaukee							
Riverside	1,463	16,710	84	11.4	199.0	17.4	80.5
North Division	1,496	12,414	77	8.3	161.0	19.4	70.
South Division	1,654	21,869	48	13.2	456.0	34.4	85.5
West Division	1,762	36,323	70	20.6	519.0	25.2	93.
Oshkosh	1,312	6,595	84	5.0	78.4	15.6	90.
Racine	1,164	9,200	36	7.8	255.0	32.4	83.5
Sheboygan	1,169	5,390	90	4.6	59.9	13.0	95.5
Waukesha	1,200	5,016	60	4.2	83.5	20.0	86.
West Allis	1,466	5,675	103	3.9	52.5	13.6	95.
Milwaukee	2,350	13,610	76	5.7	178.0	31.0	73.
WYOMING							
Basin	202	1,277	2	6.3	638.5	101.0	59.
Greybull	178	1,952	78	11.0	25.0	2.3	32.5
Laramie	168	65,000	130	387.0	500.0	1.3	90.5
Powell	190	1,040	—	5.5	—	—	59.
Riverton	100	600	—	6.0	—	—	70.5
Torrington	247	4,125	50	16.7	82.5	4.9	83.
Laramie	383	2,500	30	6.5	83.3	12.7	79.5
Rawlins	367	2,211	30	6.0	73.7	12.3	81.5
Casper	832	3,000	70	6.0	71.5	11.9	87.
Cheyenne	706	3,060	96	4.3	31.8	7.3	93.
Rock Springs	560	2,000	0	3.6	—	—	32.
Sheridan	800	3,190	102	4.0	31.3	7.8	90.

Seven Years' Development in Junior College Purposes

By FREDERICK L. WHITNEY

COLORADO STATE TEACHERS COLLEGE, GREELEY, COLORADO

The attention of both secondary and higher education has been directed of late to that segment of the school curriculum which tradition has assigned to the college but which many educationists now believe is inherently secondary in nature.

The junior college as a separate institution appeared in name many years ago, 36 of a private nature having been listed in an investigation just completed as established before 1900. One of these, Monticello Seminary, Godfrey, Illinois, is reported as having been organized in 1835, but no doubt it was not at that time a junior college in the modern sense. But in a tabulation of 238 private junior colleges now operating, one-half are found to have originated since 1918; and, in a list of 144 public junior colleges, the earliest date is 1901 (Joliet, Illinois), and one-half have been established since 1924. During the last seven years, 112 new private and 118 public junior colleges have appeared in the United States.

A segment of a nation-wide checking of the status of the junior college in America (unpublished) makes available the results of an examination of any possible contribution which these 230 new institutions have made to the junior college movement. The statement which

follows reports changes in aims or purposes which have appeared in the investigation. The technic used is similar to that of Koos¹ and makes possible direct comparison with the findings of data obtained seven years ago.

The former study secured information about the objectives or purposes of the junior college from three sources: (1) an analysis of 22 articles from educational literature; (2) a tabulation of statements in the catalogs of 23 public and (3) 33 private junior colleges. "Four of the public institutions are established in normal schools, and three more are state institutions of junior college grade. The remainder are junior colleges maintained in connection with city, union-district, township, or county high schools. Of the private junior colleges, seventeen are in southern states and sixteen in other states."²

The present checking has been secured from the 132 public and 162 private junior colleges which furnished catalogs or reported on purposes in the present study. They are situated in 24 and 41 states respectively. The majority of the public institutions are extensions of local public school systems, grades thirteen and fourteen. (No one year colleges are included.) Some 22 are state supported vocational and technical schools; agricultural schools in Arkansas, Oklahoma, Texas, and California, a science

¹Koos, L. V. *The Junior College*. Education Series No. 5, Vol. I and II, University of Minnesota, Minneapolis, May, 1924.

²Koos, L. V. *Op. cit.*

school in North Dakota, military schools in New Mexico and Oklahoma, and schools of forestry and of mines in North Dakota and Oklahoma.

Information on purposes has been obtained: (1) by an analysis of published statements in the catalogs or yearbooks of the junior colleges; and (2) by personal replies to the question "Please give the reasons for the organization of your junior college and its special purpose."

Statements of results of the analysis will be given in straightforward fashion without the use of much space for discussion or for pointing out the many interesting and significant implications appearing.

Examining first the objectives of private junior college education as conceived by 162 institutions during the school year 1927-28, Table I shows that, when the curriculum of the junior college itself is considered, for a group of nearly one-half of them (45.7 per cent), moral and religious training is the pre-eminent purpose. On the other hand, almost an equal number and proportion (43.2 per cent) have vocational aims and hope to affect the level of success reached by graduates in future life occupations. The item third in rank offers a situation acceptable to those students who can profit by but two years of higher education and proposes that it be of a well "rounded out" character, as it is to be terminal. However, many of the authorities stated plainly that they hoped to persuade students to continue their education into higher levels of college preparation. The fourth purpose refers most often to offered reduction of cost and to nearness of the junior college to the homes of prospective students. As the private school must secure its own

student body, this would seem to be a powerful argument for attendance. And the same comment may be made of the fifth item, where the merits of the comparatively small college are set forth in terms of the possibility of giving individual attention to the personal needs of students. The so-called "isthmian function" is included in the item 6. From the viewpoint of the four-year higher institution, this is of supreme importance. If students plan to go on, the lower school must offer to give them preparation for senior college work which will be much like that of the school of their choice and acceptable to its management. It is strange that the argument of home attendance (item 7) is near the lower end of this array of stated objectives. One would think that this might well be one of the most frequently recognized values of local college work in the judgment of both parents and junior college management. The offer of better instruction is akin to item 3. "Leadership" as an objective is mentioned by but a tenth of the schools, and the exploratory function comes at the bottom of the list.

It is significant to note that the frequencies of this section of Table I, dealing with the specific educational offerings of the junior college, are much larger than in the other four sections which refer to the public school system as a whole, including the university and the high school, and to local community status. Perhaps the interpretation may be that these schools are making a sincere attempt to offer two years of college education on the highest possible level without undue regard to outside influences, including the pressure of community desires of an unprofessional character. However, one-fourth of the

Table I. Special Purposes of the Private Junior College and the Proportion of Statements Recognizing Them as Given in Reports from and Catalogs of 162 Institutions in 39 States, the District of Columbia, and the Philippine Islands, 1927-28.

Item	Frequency of Mention	Per Cent That Column 2 is of Total Sources Analyzed
1	2	3
I. Affecting Education in the Two Years Under Consideration		
1. Furnishing moral and religious training.....	74	45.7
2. Providing occupational training of junior college grade.....	70	43.2
3. Completing education of students not going on*.....	57	35.2
4. Popularizing higher education.....	47	29.0
5. Affording attention to the individual student.....	41	25.3
6. Offering two years of work acceptable to colleges and universities	38	23.5
7. Continuing home influence during immaturity.....	28	17.3
8. Offering better opportunities for training in leadership.....	15	9.3
9. Offering better instruction in these school years.....	13	8.0
10. Allowing for exploration	7	4.3
II. Affecting the Organization of the School System		
1. Fostering the evolution of the system of education.....	5	3.1
2. Economizing time and expense by avoiding duplication.....	2	1.2
3. Placing in the secondary school all work appropriate to it...	1	0.6
III. Affecting the University		
1. Assuring better preparation for university work.....	13	8.0
2. Relieving the enrollment in the university.....	9	5.6
3. Making possible real university functioning.....	2	1.2
IV. Affecting Instruction in the High School		
1. Improving high school instruction.....	1	0.6
V. Affecting the Community of Location		
1. Offering work meeting local needs.....	40	24.7
2. Affecting the cultural tone of the community.....	4	2.4
3. Keeping local money at home.....	1	0.6

*Many express the hope of creating in the student a desire to continue.

junior colleges (section V, item I) are trying to fit their curriculum to the specific needs of the communities where they are located. But only one refers baldly to the economic purpose. Two other items are significantly large. The first in section III repeats the "isthmian" attitude taken in section I, and the second refers to a sore need in many states, that of relieving congested university conditions.

When the stated purposes of education in 132 public junior colleges are examined (Table II), the most frequent argument found is that for economy, over three-fourths of the schools reporting mentioning the lowering of the cost of college work as the ultimate aim for their establishment. The desirability of keeping the adolescent at home is next in order, vocational training comes next, then the terminal function,

university preparation, individual instruction including exploratory opportunities, and last of all the making of future leaders. In the other sections of this table the largest frequency refers to the meeting of the local situation in the curriculum offerings of the extension of the public school system, and it is

strange that but 10 per cent of the schools have this objective. The next largest frequency (section III, item 1) offers to relieve congestion at the state university. It is interesting to note, in

Table II. Special Purposes of the Public Junior College and the Proportion of Statements Recognizing Them, as Given in Reports from and Catalogs of 132 Institutions in 24 States, 1928

Item	Frequency of Mention	Per Cent That Column 2 is of Total Sources Analyzed
1	2	3
I. Affecting Education in the Two Years Under Consideration*		
1. Popularizing higher education†.....	101	76.5
2. Continuing home influence during immaturity.....	60	45.4
3. Providing occupational training of junior college grade.....	32	24.2
4. Completing education of those not going on.....	30	22.7
5. Offering two years of work acceptable to colleges and universities	26	19.7
6. Offering better instruction in these school years.....	19	14.4
7. Affording attention to the individual student.....	11	8.3
8. Allowing for exploration.....	2	1.6
9. Offering better opportunities for training in leadership.....	1	0.8
II. Affecting the Organization of the School System		
1. Fostering the evolution of the system of education.....	7	5.3
2. Making the school period coincide with adolescence.....	3	2.3
3. Placing in the secondary school all work appropriate to it..	1	0.8
4. Assigning a function to the smaller college.....	1	0.8
III. Affecting the University		
1. Relieving the enrollment in the university.....	11	8.3
2. Assuring better preparation for university work.....	6	4.6
IV. Affecting the Instruction in the High School		
1. Providing better department heads.....	1	0.8
2. Raising standards and putting equipment to use.....	1	0.8
V. Affecting the Community of Location		
1. Offering work meeting local needs.....	13	9.9
2. Affecting the cultural tone of the community.....	6	4.6
3. Cutting down the number leaving the community permanently	1	0.8
4. Keeping local money at home	1	0.8

*Three schools report "the usual reasons," but are not specific.

†All statements bearing on the lowering of the cost of education.

sections II and IV, the very meager recognition of the public school problem as a whole, in particular as to a defini-

tion of units and with regard to improvement at the different stages of development. Perhaps here one has a measure of the present bad eminence of educational statesmanship.

junior colleges are paralleled in Table III. With respect to the curriculum itself, the private institution emphasizes first ethical values, then vocation, terminal opportunities, fiscal economy, and

Table III. A Comparison of the Percentage of Statements Recognizing the Special Purposes of Public and Private Junior Colleges as Given in the Reports from and Catalogs of 162 Private and 132 Public Institutions, 1927-28.

Item	Private	Public
1	2	3
I. Affecting Education in the Two Years Under Consideration		
1. Furnishing moral and religious training.....	45.7	0.0
2. Providing occupational training of junior college grade.....	43.2	24.2
3. Completing education of students not going on.....	35.2	22.7
4. Popularizing higher education	29.0	76.5
5. Affording attention to the individual student.....	25.3	8.3
6. Offering two years of work acceptable to colleges and universities	23.5	19.7
7. Continuing home influence during immaturity.....	17.3	45.4
8. Offering better opportunities for training in leadership.....	9.3	0.8
9. Offering better instruction in these school years.....	8.0	14.4
10. Allowing for exploration	4.3	1.6
II. Affecting the Organization of the School System		
1. Fostering the evolution of the system of education.....	3.1	5.3
2. Economizing time and expense by avoiding duplication.....	1.2	0.0
3. Placing in the secondary school all work appropriate to it.....	0.6	0.8
4. Making the school period coincide with adolescence.....	0.0	2.3
5. Assigning a function to the small college.....	0.0	0.8
III. Affecting the University		
1. Assuring better preparation for university work.....	8.0	4.6
2. Relieving the enrollment in the university.....	5.6	8.3
3. Making possible real university functioning.....	1.2	0.0
IV. Affecting Instruction in the High School		
1. Improving high school instruction.....	0.6	0.0
2. Providing better department heads.....	0.0	0.8
3. Raising standards and putting equipment to use.....	0.0	0.8
V. Affecting the Community of Location		
1. Offering work meeting local needs	24.7	9.9
2. Affecting the cultural tone of the community.....	2.4	4.6
3. Keeping local money at home.....	0.0	0.8
4. Cutting down the number leaving the community permanently..	0.6	0.8

Relative emphases on the 25 specific purposes found in the catalogs and in reports from 162 private and 132 public

university preparation. On the other hand, the public junior college is thinking first of lowering money cost, then

of keeping youth longer under home influences, then of vocation, terminal education, and university preparation. The two least considered purposes on the part of the private junior college are the improvement of instruction and the provision of exploratory curriculums. In the public junior college, they are the exploratory function and preparation for social leadership. Outstanding contrasts in section I are with regard to moral and religious training which the public junior college does not mention at all, the popularizing of college education which the private junior college considers of minor importance, and the individualizing of college instruction which the private school stresses. It has been seen above that the frequencies in the remaining sections are much smaller for both types of institutions. Table III shows striking contrasts here, however, in two cases. Twenty-seven more of the private junior colleges, a proportion nearly three times larger, state their desire to meet outstanding local needs, and twice the percentage of public colleges wish to affect the cultural tone of their community. One would have guessed, before making this count, that the emphases would have been just the other way.

But the specific interest of this statement has to do with any changes in emphasis found in the two analyses available, any development which may have occurred in the purposes of both public and private junior colleges over a period of seven years as revealed in published catalogs and in personal reports from the management of the institutions. Table IV gives in columns 2 and 3 the proportion of 33 private schools reporting in 1920 and of 162 reporting in 1927 holding each of the 21 aims and objectives common to the two studies. The

seventh item, moral and religious training, was not segregated in the earlier investigation, but was distributed among the other items of sections I and III dealing with junior college education itself and with its effect on higher education. It is said that six statements dealing with ethical purposes were assigned to section I and twenty to section III. If the sampling of purposes found in the literature analyzed was included, this would make an emphasis for this item of about 20 per cent. If the 46 catalogs only were included, the percentage would be nearly 50. One may assume, then, that there has been no striking change in the purposes of private junior colleges with regard to moral and religious training during the last seven years. However, several very apparent contrasts can be seen in Table IV. (1) Three times the proportion of private junior colleges are now offering curriculums organized with a view to terminal opportunities. (2) Over one-fourth, as compared to none, aim to popularize higher education. (3) A few, as compared to none, offer improved instruction and exploratory courses. (4) The "small college" idea seems to have dropped out since 1920. (5) All of the other purposes of Table IV are new with varying degrees of emphasis. Table V lists these in rank order, and it is seen that very probably the percentage numbers of the first two or four only are of significant size.

It is illuminating to note that the private junior college is changing its objectives with respect to democratic purposes such as these. No doubt, as in the history of the academy and the high school, this has been found necessary in order that it may successfully compete with the public institution, which is an extension of a publicly supported public

Table IV. The Percentage of Statements Recognizing the Special Purposes of Private Junior Colleges at the Beginning and Close of a Seven Year Period, 1920-27

Item	Percentage 1920-21* (33 Colleges)	Percentage 1927-28 (162 Colleges)
1	2	3
I. Affecting Education in the Two Years Under Consideration		
1. Offering two years work acceptable to colleges and universities.....	93.9	23.5
2. Providing occupational training of junior college grade....	48.5	43.2
3. Affording attention to the individual student.....	30.3	25.3
4. Completing education of students not going on.....	12.1	35.2
5. Continuing home influence during immaturity.....	12.1	17.3
6. Offering better opportunities for training in leadership....	6.1	9.3
7. Furnishing moral and religious training.....	0.0	45.7
8. Popularizing higher education.....	0.0	29.0
9. Offering better instruction in these school years.....	0.0	8.0
10. Allowing for exploration.....	0.0	4.3
II. Affecting the Organization of the School System		
1. Assigning a function to the small college.....	3.0	0.0
2. Fostering the evolution of the system of education.....	0.0	3.1
3. Economizing time and expense by avoiding duplication....	0.0	1.2
4. Placing in the secondary school all work appropriate to it	0.0	0.6
III. Affecting the University		
1. Assuring better preparation for university work.....	0.0	8.0
2. Relieving the enrollment in the university.....	0.0	5.6
3. Making possible real university functioning.....	0.0	1.2
IV. Affecting Instruction in the High School		
1. Improving high school instruction	0.0	0.6
V. Affecting the Community of Location		
1. Offering work meeting local needs.....	0.0	24.7
2. Affecting the cultural tone of the community.....	0.0	2.4
3. Keeping local money at home.....	0.0	0.6

*Koos, Leonard C. *The Junior College*. Education Series No. 5, Vol. I, University of Minnesota, Minneapolis, May, 1924.

school system.

Turning to the purposes of the public junior college for data on a seven years' development (Table VI), the contrasts among 21 items common to the earlier and the present study are shown in columns 2 and 3. At first glance, the paralleled percentages seem to be more offering vocational curriculums. Item 5, section I, seems to say also that in the

modern junior college there is but about one-third the emphasis on individual education, but item 7 reports renewed emphasis on better instruction. Perhaps the increasing size of many public school systems accounts for the former. Item 6 reports the recent argument of second rank for local college work, that of continued home influence. In Table VII, the eleven new items of purpose are

stable, but certain differences may be found. The most striking of these is in item 1, section I, where it is seen that secondary education as offered in the local system is fast breaking away

flecting a recognition of need in state higher education.

In general, it may be said that this analysis reveals more, and more striking, changes in private junior college

Table V. Rank Order of New Functions of the Private Junior College Appearing in Their Statements of Special Purposes After a Lapse of Seven Years, 1920-27

Rank	Item	Percentage 1927-28
1	2	3
1.	Popularizing higher education	29.0
2	Offering work meeting local needs	24.7
3.5	Assuring better preparation for university work.....	8.0
3.5	Offering better instruction in these school years.....	8.0
5	Relieving the enrollment in the university.....	5.6
6	Allowing for exploration	4.3
7	Fostering the evolution of the system of education.....	3.1
8	Affecting the cultural tone of the community	2.4
9.5	Economizing time and expense by avoiding duplication.....	1.2
9.5	Making possible real university functioning.....	1.2
12	Placing in the secondary school all work appropriate to it.....	0.6
12	Improving high school instruction.....	0.6
12	Keeping local money at home	0.6

from the age-old domination of higher education. The other outstanding lesser frequency is reported in item 3, section I, which shows that but one-half the proportion of junior colleges are now listed in rank order. It is seen that their frequencies are small as compared with those for the private schools (Table V), but the first at least is significant as re-

purposes. The public junior college has to a large degree always been frankly an extension of a system of public school offerings. It would seem that the outstanding changes appearing in private junior college objectives have in mind the organization of post high school offerings on a comparable level of value with those found in the public schools.

Table VI. The Percentage of Statements Recognizing the Special Purposes of Public Junior College at the Beginning and Close of a Seven Year Period, 1920-27

Item	1920-21*	1927-28
	(23 Colleges)	(132 Colleges)
1	2	3
I. Affecting Education in the Two Years Under Consideration		
1. Offering two years of work acceptable to colleges and universities	95.7	19.7
2. Popularizing higher education	65.2	76.5
3. Providing occupational training of junior college grade....	52.2	24.2
4. Completing education of students not going on.....	21.7	22.7
5. Affording attention to the individual student.....	21.7	8.3
6. Continuing home influence during immaturity.....	17.4	45.4
7. Offering better instruction in these school years.....	4.3	14.4
8. Allowing for exploration	0.0	1.6
9. Offering better opportunities for training in leadership....	0.0	0.8
II. Affecting the Organization of the School System		
1. Placing in the secondary school all work appropriate to it	8.7	0.8
2. Fostering the evolution of the system of education.....	0.0	5.3
3. Making the school period coincide with adolescence.....	0.0	2.3
4. Assigning a function to the smaller college.....	0.0	0.8
III. Affecting the University		
1. Assuring better preparation for university work.....	8.7	4.6
2. Relieving the enrollment in the university.....	0.0	8.3
IV. Affecting Instruction in the High School		
1. Providing better department heads.....	0.0	0.8
2. Raising standards and putting equipment to use.....	0.0	0.8
V. Affecting the Community of Location		
1. Offering work meeting local needs.....	17.4	9.9
2. Affecting the cultural tone of the community.....	0.0	4.6
3. Cutting down the number leaving the community permanently	0.0	0.8
4. Keeping local money at home.....	0.0	0.8

*Koos, Leonard V. *The Junior College*. Education Series No. 5, Vol. I, University of Minnesota, Minneapolis, May, 1924.

Table VII. Rank Order of New Functions of the Public Junior College Appearing in Their Statements of Special Purposes After a Lapse of Seven Years, 1920-27

Rank	Item	Percentage 1927-28
1	Relieving the enrollment in the university.....	8.3
2	Fostering the evolution of the system of education.....	5.3
3	Affecting the cultural tone of the community.....	4.6
4	Allowing for exploration	1.6
8	Offering better opportunities for training in leadership.....	0.8
8	Placing in the secondary school all work appropriate to it.....	0.8
8	Assigning a function to the smaller college	0.8
8	Providing better department heads.....	0.8
8	Raising standards and putting equipment to use.....	0.8
8	Cutting down the number leaving the community permanently.....	0.8
8	Keeping local money at home	0.8

Some Similarities and Some Differences in the Standards Defined by Regional Standardizing Associations for Secondary Schools*

E. D. GRIZZELL, UNIVERSITY OF PENNSYLVANIA
CHAIRMAN, COMMISSION ON SECONDARY SCHOOLS

ASSOCIATION OF COLLEGES AND SECONDARY SCHOOLS OF THE MIDDLE STATES AND MARYLAND

I. General Tendencies in Accrediting Secondary Schools.

Although regional associations of colleges and secondary schools began as early as 1885 with the organization of the New England Association, the development of standards for secondary schools has been a slow process. The North Central Association was the first to formulate such standards. These standards, established in 1905 and modified from time to time, have served as a guide to the associations in the Southern, Northwest and Middle States as they have established Commissions on secondary schools and formulated standards for the secondary schools of their respective territories. Although the New England Association is the oldest, no standards have been established by that Association. The only regional agency for standardization in that territory is the New England College Entrance Certificate Board which maintains a list of several hundred schools.

In making a comparison of the standards for secondary schools of the four Associations that have established such standards, one would expect to find a

large measure of similarity because of the general similarity of practice in American secondary education, and because of the pioneer work in standardization of the North Central Association. There exist, on the other hand, certain striking differences in the standards which are due largely to variations in practice in the regions represented as to independent leadership in each territory.

It is the purpose of this discussion to point out the similarities and differences, and to indicate in what respects modification and extension of standards seem desirable.

II. Features and Relationships Considered in the Standards of the four Associations.

1. FEATURES AND RELATIONSHIPS COMMON TO ALL STANDARDS

An analysis of the standards of the several associations shows that the following features and relationships are common to all: (1) graduation requirements, (2) definition of unit, (3) minimum length of school year and class period, (4) efficiency of instruction, (5) habits of study, (6) general intellectual and moral tone or level (atmosphere) of the school, (7) number of teachers, (8)

*A paper presented before an organization meeting of Regional Standardizing Agencies held in Boston, Feb. 28, 1928.

preparation of teachers, (9) teacher-load, (10) teacher pupil ratio, (11) salary, (12) buildings and equipment—including hygienic conditions, (13) laboratory and library facilities. Although these thirteen features and relationships are given consideration in the standards of the four associations, they differ in certain respects that will be pointed out later.

2. FEATURES AND RELATIONSHIPS NOT COMMON TO THE FOUR ASSOCIATIONS

The differences to be noted are significant in reflecting regional differences in attitude toward certain marginal factors.

(1) "Achievement of graduates of a school in higher institutions" is recognized specifically only in the Middle States and Southern Associations. (2) "Program of studies" is prescribed more or less specifically in the North Central and Middle States. All the standards, however, give consideration to special and vocational subjects. (3) "Pupil-load" is given specific attention by three associations, the Middle States giving it consideration only by implication in the definition of unit as being an amount of work requiring approximately one-fourth of the pupils' time. (4) "Records" are considered by the North Central and Northwest Association and not mentioned by the other two. (5) "Teachers' assignments" are mentioned only in the North Central Standards. (6) Community attitude is considered only by the North Central Association, no reference being made to the community in the standards of the other associations.

III. Similarities in Standards.

In general, the standards of the four associations are concerned with the same features and relationships: (1) buildings and equipment, (2) laboratories and li-

brary, (3) requirements for graduation, (4) instruction and spirit, (5) salaries, (6) preparation of teachers, (7) number of teachers, (8) teacher-load, (9) program of studies. As indicated above, certain other items are considered important in one or more of the associations, e. g. pupil-load and records.

It appears, from an analysis of the standards that there is specific agreement in all the standards concerning the following:

(1) Building standards are almost identical, except that the standard for building, etc. in the Middle States is not so specific as the standards of the other associations.

(2) The standards for laboratory and library facilities are practically the same, except that the North Central standard requires that the library be classified and catalogued and that an annual inventory be made of laboratory and shop equipment. The Northwest standard requires proper cataloging and housing. The Southern Association requires a minimum of five hundred volumes exclusive of duplicates and government publications.

(3) The standard regarding instruction and spirit is practically identical in the four associations.

(4) The standards governing teacher-load are practically the same and include the following items: Pupil-teacher ratio, number of classes taught by each teacher, number of pupil hours per teacher. The same norms are accepted by all associations.

IV. Differences, in Standards.

(1) The standards concerning requirements for graduation vary somewhat in the several associations. The Middle States and Southern associations

recognize only a four-year secondary school; the standard of the Middle States requires fifteen units and that of the Southern States requires sixteen units. The North Central and Northwest standards recognize both the four-year and three-year secondary school and require fifteen units and eleven units respectively for graduation.

(2) The standard for minimum number of teachers varies. The Middle States require the equivalent of three teachers of academic subjects. The Southern States require four full time teachers and additional teachers to handle vocational subjects if offered. The North Central requires for all new schools at least five teachers of academic subjects, each to be assigned work in the field of his major or minor specialization. The Northwest Association requires four teachers as academic subjects not including the superintendent.

(3) The standards for salaries are extremely indefinite, except in the Southern association, the minimum there being \$1000 per year for teachers.

(4) The standards for preparation of teachers vary in several respects. All the associations have made graduation from a recognized college or university the minimum but with certain limitations. The Middle States and Southern Associations require that at least three-fourths of the teachers of academic subjects hold standard four-year degrees. The Southern Association specifically includes the principal and teachers of agriculture and home economics in this category. The North Central and Northwest Associations require that all teachers hold the bachelor or equivalent degrees from recognized institutions. This requirement is not retroactive in either association and the Northwest Association will

accept a new school applying for the first time with eighty per cent of the teachers meeting the degree requirements, provided the remaining twenty per cent have been in service in the school more than two years.

The professional training requirement is extremely variable. In the Middle States experience may be substituted for professional training. In the Southern States all beginning principals and teachers are required to have not less than twelve semester hours work in Education. The North Central Association requires that all new teachers of academic subjects and supervisors of such subjects shall have fifteen semester hours in education. Certain definite types of work are recommended as meeting this requirement. The Northwest Association likewise requires fifteen semester hours of professional training for all new teachers and specifies training in the subject matter and pedagogy of the subject to be taught.

(5) The standards for the program of studies are variable. The standard of the Middle States recommends English, mathematics, foreign languages, social and natural sciences, practical and fine arts, physical education, and vocational subjects where local conditions permit. The North Central Association recommends three units in English, two units in social science, one unit in biological science or general science and one unit in physical education or health (with or without credit). Vocational subjects are recommended where local conditions permit. The Northwest Association makes no definite recommendation concerning the subjects to be included in the program of studies except that where local conditions permit vocational subjects are recommended. By implication

from the Association's interpretation of the academic subjects, the regular program would include "English, laboratory science, mathematics, foreign language, history and social science." The standard of the Southern Association is similar to that of the Northwest.

In addition to these common features and relationships concerning which differences in practice exist, there are certain other items mentioned only by particular associations. (1) Pupil-load is probably the most significant. This item is given special attention by both the North Central and Northwest Associations and mentioned in another connection by the Southern Association. If touched at all by the Middle States, it is merely by implication in the definition of the unit. Such items as length of period of accreditation, submission of the annual report, and other details concerned with the administration of the standards are not standards essentially, but rather regulations or matters of policy.

V. Summary of Similarities and Differences.

In general the standards of the four regional associations are more alike than they are different. The similarities in standards pertain to the following:

- (1) Buildings and equipment;
- (2) Laboratories and library;

(3) Instruction and spirit (atmosphere);

(4) Teacher-load.

The differences in standards in some instances are significant. Most of the differences are probably due to peculiar practices in the different regions represented. The chief differences in standards pertain to

(1) Requirements for graduation;

(2) Minimum number of teachers per school;

(3) Salaries—indefinite rather than variable;

(4) Preparation of teachers;

(5) Program of studies.

(6) Pupil load.

In spite of apparent significant differences, they are actually of minor importance except in the case of graduation requirements, number of teachers, professional training requirements, and pupil-load.

In the light of this analysis, it would seem desirable and well-nigh imperative that the representatives of regional accrediting agencies get together on a co-operative research program that would provide the basis for a refinement and evaluation of the present standards. Such a program perhaps would suggest extensions of standards to include other significant features and relationships in the field of secondary education.

